BMJ Open Patient and proxy perspectives in decision-making for geriatric hip fracture management in the Netherlands: a qualitative study

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ABSTRACT

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Objective The objective of this study was to explore the perspectives with the decision-making process between surgery and palliative, non-operative management of geriatric hip fracture patients and their proxies. **Design** A qualitative interview study was performed. Patients and proxies were asked to participate in semistructured interviews. Data were analysed using reflexive thematic analysis according to Braun and Clarke's six-step quide.

Setting and participants Hip fracture patients in the Netherlands were eligible for inclusion. For hip fracture patients with a pre-existing diagnosis of dementia and for patients who opted for palliative, non-operative management, proxies were included.

Results A total of 16 interviews were conducted, consisting of 4 patient interviews and 12 proxy interviews. Five themes were identified during thematic analysis: (1) underlying patient values, (2) the provision of information, (3) reasons to consider either palliative, non-operative management or surgery, (4) involvement in decision and (5) realisation of expectations. Information provided by the physician varied in terms of desired level of detail but involved discussing the advantages and disadvantages of surgery and palliative, non-operative management. Patients and proxies underscored the importance of achieving optimal quality of life, and the disparity between expected and actual treatment outcomes was unpleasant and negatively influenced the overall experience.

Conclusions In-depth analysis provided a unique insight into the patient and proxy perspectives in shared decision-making for geriatric hip fracture management in the acute setting. Overall, there were differences between reported experiences and preferences of participants. This heterogeneity stresses the importance of keeping a person-centred approach during shared decision-making. Other key considerations during shared decision-making include physicians informing patients from professional experience and communicating sensitively about both treatment options and prognosis. Physicians should aim to provide realistic, sensitive and timely information to both patients and proxies during the choice between curation and palliation for their hip fracture.

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 STRENGTHS AND LIMITATIONS OF THIS STUDY

 ⇒ A holistic approach was used, extending beyond mere consideration of the fracture itself.

 ⇒ Besides interviewing patients, experiences were also obtained by interviewing proxies.

 ⇒ Although geriatric hip fracture care is an international phenomenon, it was conducted in Dutch trauma geriatric care.

 ⇒ Face-to-face interviews might have enriched the data for thematic reflexive analysis.

 ⇒ More homogeneity in time to interview could have provided a clearer view on experiences at a certain moment after treatment.

 NTRODUCTION

 Geriatric hip fractures are becoming increasingly prevalent and are generally treated with surgery, that is, operative management

with surgery, that is, operative management \exists (OM).¹⁻⁴ OM provides quick analgesia and allows patients to start rehabilitation but is associated with high morbidity and mortality. Common postoperative complica-tions include urinary tract infections, pneu-monia and delirium, and the 1-year mortality **g** following OM is $\sim 25\% - 35\%$.⁵⁻⁹ Depending on the patient's goals of care (GOC), the emergence of Palliative, Nonoperative Management (P-NOM) provides an alternative when limited added value of OM is expected.¹⁰⁻¹³ With P-NOM, the focus primarily lies on **Chronic Control** in the patient's GOC, comfort and adequate **O** analgesia.

In an acute setting, the treating physician can initiate a shared decision-making (SDM) process to determine the course of treatment based on the patient's GOC.¹⁴ For hip fracture patients, these GOC serve as the cornerstone in selecting the most suitable course of action, emphasising the vital role of the patient's perspective in SDM.11 14 Recent work into the most important GOC for geriatric patients in the case of hip fracture has

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		Pre-existing diagn	agnosis of dementia?		
		Dementia YES	Dementia NO		
atment	ОМ	Cohort A OM Dementia YES	Cohort B OM Dementia NO		
Type of tre	P-NOM	Cohort C P-NOM Dementia YES	Cohort D P-NOM Dementia NO		

Figure 1 The formation of the cohorts. OM, operative management; P-NOM, palliative, non-operative management.

shown heterogeneity between patients' and proxies most important GOC.¹⁴

GOC-based SDM between OM and P-NOM for geriatric patients with limited longevity is complicated due to uncertainty in forecasting a patient-specific prognosis, the absence of a pre-existing patient-physician relationship and time pressure originating in an optimal window of OM of 24-48 hours.¹⁵⁻²² Additionally, the unforeseen acute hip fracture setting is emotionally demanding for patients and proxies, which makes it difficult for patients and proxies to retain information.^{15 18 23}

With the emergence of P-NOM and associated SDM, it has become essential to explore the perspectives of this fragile population on SDM in the acute hip fracture setting.^{11 24} To the authors' knowledge, these perspectives have not been documented in scientific literature before. Therefore, the objective of this study was to explore the perspectives of geriatric patients and their proxies with SDM in case of a hip fracture regarding OM and P-NOM.

METHODS

Design

A qualitative interview study was performed in a large regional rural hospital in the Netherlands between 1 December 2022 and 1 February 2023. To minimise recall bias, patients and proxies were asked to participate within a year after presentation at the emergency department (ED) with a hip fracture. The 'Standards for Reporting Qualitative Research' by O'Brien et al guided this article and are attached in online supplemental appendix 1.²⁵

Patient and public involvement

Patients and/or the public were not involved in the design, or conduct, or reporting or dissemination plans of this research.

Participants

Hip fracture patients were retrospectively identified from the electronic patient file and eligible for inclusion if they were aged 70 years or above and diagnosed with a femoral neck, intertrochanteric or subtrochanteric fracture. Patients were allocated between four cohorts according to the type of treatment (OM or P-NOM) and the presence of a pre-existing dementia diagnosis. Cohort

A contained patients with dementia who opted for OM, cohort B contained patients without dementia who opted for OM, cohort C contained patients with dementia who opted for P-NOM and cohort D contained patients without dementia who opted for P-NOM (figure 1). The study adopted a phenomenological perspective, acknowledging perceptions of individuals exist within a reality beyond their individual experiences.²⁶ Therefore, both patients and proxies were eligible to participate in the study. For hip fracture patients with a pre-existing diagnosis of dementia (cohorts A and C) or patients who opted for P-NOM (cohorts C and D), proxies were asked to participate in the semistructured interview. Proxies were eligible for inclusion if they were offspring, partners or caregivers of a patient meeting the inclusion criteria. copyright, incl Patients and proxies were excluded from the study if they lacked fluent Dutch or English proficiency.

Recruitment and consent

Convenience sampling was used to include patients and proxies. Patients and proxies were recruited by calling the patient or their proxy as registered in the electronic patient file. All eligible patients and proxies received a uniform informative introduction by telephone regarding the study. Patients and proxies provided verbal informed consent, after which an interview was scheduled. Patients and proxies could withdraw from the interview at any point. Patient recruitment started with patients who were presented at the ED on 24 November 2022 and e was continued further into the past, ensuring no omissions. Four patients or proxies per cohort were initially included. data

Data collection

An interview guide was used during the semistructured interviews, which were conducted via telephone. The ≥ semistructured interview guide for patients and proxies is attached in online supplemental appendix 2. The interviews were recorded, and the audio recordings were anonymously stored in a secured server. DWPML, AvdB and TMN conducted the interviews. TMN is a medical doctor, and DWPML is a medical student. Both are experienced with qualitative studies in trauma geriatrics. AvdB is a sociology student researcher at the trauma geriatric research department. In addition to the qualitative data on the patient and proxies' perspectives, baseline characteristics of patients and proxies were collected from the electronic health records and the interviews. In patients, 🗳 data were collected on age (in years), sex (male/female), 3 the presence of a pre-existing diagnosis of dementia, Charlson Comorbidity Index (CCI), living situation (independent at home, home with activities of daily living care, institutional care facility), type of management (OM, P-NOM), admittance to our hospital, mortality and time from hospital admission to death (days). In proxies, additional data were collected on age (in years), sex (male/ female) and relation to the patient (spouse, offspring, or acquaintance).

Qualitative analysis

A reflexive thematic analysis was performed following Braun and Clarke's six-step guide.²⁷ The interview recordings were transcribed ad verbatim by DWPML and AvdB. DWPML and AvdB familiarised with the data during both transcription and repetitive reading of the transcripts. Hereafter, DWPML and AvdB established data saturation and proceeded to formulate preliminary themes. The transcripts were then coded by DWPML and an independent researcher (TK) using ATLAS.ti (V.23.1.1.0). In the analytic process, several theoretical assumptions were made.²⁸ A constructionist epistemology was chosen to acknowledge the significance of recurrence while prioritising meaning and meaningfulness as central criteria. An experiential orientation was chosen to acknowledge the subjective reproduction of thoughts, feelings and experiences. A combination of inductive and deductive analysis was employed, inductive to generate themes based on the data and deductive based on the predetermined topics as provided in the interview guide. Semantic and latent coding was used, switching between techniques based on the properties of the data analysed.

Based on assigned codes, the themes were repeatedly compared and redefined as needed in intercoder meetings between DWPML and TK, with approval of AvdB and TMN. When comparing codes and thematic analysis, a collaborative and reflexive approach was used to enrich the themes rather than achieve consensus. Themes were connected logically and meaningfully and placed in the

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appropriate context, as reported in the Results section of this article.

RESULTS

A total of 16 interviews were conducted, lasting between 30 min and 60 min and consisting of 4 patient interviews and 12 proxy interviews (figure 2). The baseline characteristics of all patients and proxies are presented in table 1. The median age of the patients was 84 (IQR 80-91), 10 (63%) patients with female sex and a median CCI of 6 (IOR 5-6). All patients were admitted to the hospital, with a median length of stay of 6 (IQR 3-10) days. Of the patients who received P-NOM, six (75%) were deceased at the time of the interview, with a median time from hospital admission to death of 14 (IOR 7-48) days. One patient (13%) who received OM was deceased at the time of the interview. The included proxies had a median age of 62 (IQR 56–69), 8 (67%) were female, and 11 (92%) were offspring. The most recent patient who was included 둽 was diagnosed with a hip fracture on 19 November 2024, and the patient included furthest back in history was diag-₫ nosed with a hip fracture on 2 February 2022.

lses Cohorts A, B, C and D had a median age of 88 (IQR 84-90), 83 (IQR 90-91), 94 (IQR 81-101) and 75 (IQR 71-81), respectively. In cohort D, all patients lived at lated home without needing additional care for Activities of ð Daily Living (ADL). Regarding patients in cohorts A, text B and C, two patients (50%), three patients (75%) and



Flowchart of the selection process of included patients and proxies. *Patient recruitment started with patients Figure 2 who were presented at the emergency department at 24 November 2022 and was continued further into the past, ensuring no omissions. Patient recruitment ended when four patients per cohort were included.OM, operative management; P-NOM, palliative, non-operative management.

Table 1 Baseline characteristics of included patients and proxies

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		Cohort A Demented OM	Cohort B Demented P-NOM		
Patient characteristics	Total N=16	N=4	N=4	Cohort C No dementia P-NOM N=4	Cohort D No dementia OM N=4
Age (years), median (IQR)	84 (80–91)	88 (84–90)	83 (80–91)	94 (86–101)	75 (71–81)
Female sex, n (%)	10 (63)	4 (100)	3 (75)	1 (25)	2 (50)
Dementia, n (%)	8 (50)	4 (100)	4 (100)	_	_
CCI, median (IQR)	6 (5–6)	6 (5–6)	7 (5–7)	5 (4–10)	4 (3–4)
Living situation, n (%)					
Home, independent	5 (31)	_	1 (25)	_	4 (100)
Home, with ADL care	4 (25)	2 (50)	_	2 (50)	_
Institutional care facility	7 (44)	2 (50)	3 (75)	2 (50)	-
Management					
Surgery	8 (50)	4 (100)	_	_	4 (100)
P-NOM	8 (50)	-	4 (100)	4 (100)	-
Admittance in hospital, n (%)	16 (100)	4 (100)	4 (100)	4 (100)	4 (100)
Length of stay (days), median (IQR)	6 (3–10)	10 (4–15)	4 (2–12)	6 (2–10)	5 (3–7)
Deceased at the time of the interview, n (%)	7 (44)	1 (25)	2 (50)	4 (100)	-
Time from hospital admission to death (days), n (%)	14 (7–48)	48 (48–48)	15 (10–15)	10 (3–91)	_
Time to interview (days), median (IQR)	61 (53–141)	59 (50–69)	85 (53–113)	320 (188– 342)	54 (50–60)
Proxy characteristics	Total N=12	Cohort A N=4	Cohort B N=4	Cohort C N=4	
Age (years), median (IQR)	62 (56–69)	63 (53–66)	59 (55–79)	66 (57–71)	
Female sex, n (%)	8 (67)	3 (75)	3 (75)	2 (50)	
Relationship with patient, n (%)					
Spouse	1 (8)	_	1 (25)	_	
Offspring	11 (92)	4 (100)	3 (75)	4 (100)	
Cohort A: Geriatric hip fracture patients with dementia who Cohort B: Geriatric hip fracture patients with dementia who Cohort C: Geriatric hip fracture patients without dementia w Cohort D: Geriatric hip fracture patients without dementia w .CCI, Charlson Comorbidity Index; OM, operative manager	have chosen (have chosen F who have chose who have chose nent; P-NOM, p	DM (interview with P-NOM (interview en P-NOM (intervie en OM (interview v palliative non-oper	proxy). with proxy). ew with proxy). with patient). rative managemer	nt.	
wo patients (50%) lived in an institutional care respectively. During thematic analysis, five themes were ied: (1) underlying patient values, (2) the prov nformation, (3) reasons to consider either P-N DM, (4) involvement in decision and (5) realist expectations.	facility, identi- ision of NOM or ation of	the essence of individual inte as: 'reading, h and also parti Both patients : adequate self- qualitative me	E life as a state erpretations en aving conversa cipating in so and proxies ac reliance as es asure of life. I	e of happiness acompassing a ations', 'just g ociety and 'he ldressed indep sential contril in response to	, with various activities such oing his way', lping others'. oendence and outors to the the question

Theme 1: underlying patient values

This theme uncovers the values guiding treatment decisions, shedding light on patients' desires for independence, mobility, cognitive function and pain relief, directly informing the decision-making process between surgery and palliative care. Patients and proxies described adequate self-reliance as essential contributors to the qualitative measure of life. In response to the question about what patients did not want, patients and proxies offered various descriptions of a state characterised by complete dependency on care and devoid of happiness, referring to it as a 'vegetative state'.

If a phase comes where mom deteriorates significantly, and I will call it vegetating, for lack of a better

term, then surgery will no longer be pursued. Proxy 1: Proxy of patient with dementia who chose OM.

Mobility was described as a prerequisite for engaging in activities with a certain degree of independence. Even minor improvements in mobility could contribute to the quality of one's life. Also, preserving every bit of cognitive function was deemed very valuable in the last phase of life. However, the impact of cognitive impairment had to do with the patient's state of mind: a patient unaware of her Alzheimer's diagnosis still exhibited happiness. In contrast, another patient displayed aggressive behaviour devoid of happiness.

Overall, things are going quite well, and she still enjoys the moments we are together. She also continues engaging in enjoyable activities in her home and generally remains cheerful. Proxy 2: Proxy of patient with dementia who chose OM.

I do not think she knows anymore that she has Alzheimer's, but she is still happy. Moreover, she indicated recently: I am still glad to be here. Proxy 4: Proxy of patient with dementia who chose OM.

The absence of pain was deemed of utmost importance for the quality of life, where pain was mentioned as a crucial factor in 'letting life go'. In essence, in treatment decision-making, individuals strive for optimal quality of life characterised by happiness, which is a subjective experience.

If the pain continues like this, I do not want it.' She has expressed this to several people in different circumstances. (a proxy of a patient describing the pre-fracture situation and pain experience before P-NOM) Proxy 11: Proxy of patient without dementia who chose P-NOM.

Theme 2: the provision of information

This theme reveals how patients and proxies seek and receive information, influencing their understanding of treatment options and their involvement in decisionmaking, thus impacting perspectives on OM versus P-NOM. For 14 of the 16 participants, the conversations with the physician were the most important source of information. All interviewed patients indicated they had 'enormous' trust in the medical staff and consequently relied on the information provided, resulting in little need for additional information. For two proxies, questions remained about the details of P-NOM, such as 'how to proceed' and 'who ultimately arranges for the patient to be comfortable and how that will happen'. These two proxies consulted the internet for additional information.

They could explain that more clearly, this palliative care. Proxy 5: Proxy of patient with dementia who chose P-NOM.

Essential questions patients and proxies wanted to express during SDM concerned the treatment options,

the added value of OM, the timing and logistics of OM, the revalidation process and pain management. The desired level of detail in the provision of information varied. Regarding the patients in cohort D, two of the four patients indicated they would have liked information about the specific surgical techniques and prospects regarding the rehabilitation process. In contrast, all four patients in cohort D stated that there was no necessity to discuss complications since they 'wanted surgery anyway' and 'would only get nervous about possible complications'. This discrepancy reflects variability in desired of shape and amount of information, where the provider of the information, that is, the physician, plays a major role. by copyright, including for uses related to text and

I was just like, guys, throw me into that operating room, get busy! Patient 1: Patient without dementia who chose OM.

I was already happy to be there and believed everything I was told. Patient 2: Patient without dementia who chose OM.

How long before I could do anything again? Patient 3: Patient without dementia who chose OM.

Theme 3: reasons to consider either P-NOM or OM

This themes involve the specific reasons to opt for P-NOM or OM. Important considerations for choosing OM were 'being able to walk again', 'having better longevity' (compared with choosing P-NOM), 'being able to return home' and 'being relieved of pain'.

To operate or not to operate means to have mobility or not to have mobility. Proxy 4: Proxy of patient with dementia who chose OM.

min Proxies of patients who opted for P-NOM reported that the decision was primarily based on the following consid-≥ erations: the lack of added value of OM if a patient already had impaired mobility or short longevity, the desire to be pain free, anaesthesiologic objections for surgical treatğ ment based on medical history, cognitive issues of the patient that would result in a more challenging rehabilitation (ie, instructability) and a completed life wish of the patient. It is remarkable that alleviating pain was mentioned as a reason to opt for both OM and P-NOM, reflecting that decision-making may be based on subjective judgement. Instead of objective measures, patients nol choose a management that fits their idea of a happy life, grounded in underlying patient values as described in theme 1.

In five out of eight surgically treated patients, the option of P-NOM was not brought during SDM. When a curative management was absolutely preferred, patients reported no need to discuss P-NOM. When P-NOM was discussed, proxies reported being informed that pain management would be prioritised and involved absent mobility and possible swift demise. In terms of prognosis, wide variations were discussed, from mortality within 1 year to mortality within 10 days.

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I just wanted surgery; I was not nervous about that. Patient 1: Patient without dementia who chose OM.

The more information you get, I think, the more worried you can get. Patient 4: Patient without dementia who chose OM.

Theme 4: involvement in decision

This theme outlines the relevance of patient involvement and proxy involvement in treatment decision-making, with time and space to reflect during this process and an important role reserved for the physician. These components are surrounded by the emotional burden that participants reported were associated with considering PNOM.

A varying degree of SDM was reported, where the identity of the decision-maker differed. This ranged from patients making independent decisions or joint decisionmaking of the patient with a proxy, to proxies deciding on behalf of the patients and some patients leaving the decision entirely to the physician. When the course of treatment was evident towards OM, SDM was merely aimed at providing insights into the treatment and rehabilitation process. Despite this variation, collaboration with the physician in SDM was widely appreciated and a lack of opportunity to participate in treatment choice was perceived negatively.

I think having a say in the decision-making process is important, not just the doctor or the patient deciding everything (...) You listen most to the doctor. I am not an expert, but I can discuss and think about what the doctor says and talk about it. Patient 3: Patient without dementia who chose OM.

Time and space for reflection in SDM were also positively valued. The first SDM dialogue was performed at the ED where the GOC were evaluated and both options (OM and P-NOM) presented. In some cases, patients and families opted for a particular treatment in the acute setting. However, a time-out was preferred, followed by a second or sometimes even a third SDM dialogue. This allowed patients and proxies to reflect if the provided information was comprehensible and if they had any remaining questions.

Just making contact with the patient's family, telling them how things are going, always being available for questions, is incredibly important. Proxy 11: Proxy of patient without dementia who chose P-NOM.

Patients and proxies highly valued the physician's role, describing it as informative and guiding. Healthcare professionals' professional experiences with hip fracture treatment were preferred as information source over sole presentation of statistical data or information brochures. Communication and information tailored to both patient characteristics and care situation were considered indispensable, where a seating posture of the physician was perceived as positive and a standing position as unfavourable. In communication regarding the prospects in

life duration, a direct approach was perceived as highly inappropriate.

During the conversation, we had the space to express that we would prefer her to undergo surgery. (...) We have no experience, so we rely on those people and hold them in high regard. Proxy 5: Proxy of patient with dementia who chose P-NOM.

Considering the treatment option P-NOM was reported as carrying a 'substantial emotional burden', arising from **D** the sudden nature of a hip fracture combined with the confrontation with an unfamiliar poor prognosis. The decision-making itself added to the emotional load through the time pressure and the final nature of the copyright, including decision. Even reflecting on their decision in the study was perceived as challenging by both patients and proxies, which underscores the emotional load.

We always stood behind that decision afterwards. That sounds contradictory because we did lose our mother because of it. Proxy 8: Proxy of patient with dementia who chose P-NOM.

I remember very well that it (discussing P-NOM) overwhelmed me; I thought 'Oh dear, what now?'. Proxy 2: Proxy of patient with dementia who chose OM.

Theme 5: realisation of expectations

In this theme, the importance of alignment between anticipated and actual treatment outcomes is addressed. A disparity between expected and actual treatment outcomes was reported as unpleasant and negatively influenced the overall experience. This concerned outcomes such as pain management, rehabilitation and P-NOM, a which are elaborated further.

Patients and proxies in both P-NOM and OM indicated they desired to be fully pain free, for which prompt administration of analgesia was essential. When a PENG block was performed, patients and proxies expected that this treatment would provide complete pain reduction. This was disappointing, because achieving comfort generally required additional oral analgesia.

The post-operative rehabilitation process performing below expectations regarded both physical and cognitive terms. Physical rehabilitation went slower than expected in four of the eight surgically treated patients, which was perceived negatively. Three operatively treated patients with a pre-existing diagnosis of dementia showed a substantial cognitive decline since the operation, which $\underline{\underline{G}}$ also impeded physical rehabilitation. Especially the sudden nature of cognitive decline was unexpected and not pleasant.

That she would deteriorate so incredibly mentally, we did not expect that. Proxy 3: Proxy of patient with dementia who chose OM.

They did say that recovery can take six months, but even so, it is too slow for me. Patient 1: Patient without dementia who chose OM.

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I do not walk charmingly, but I do walk. Patient 2: Patient without dementia who chose OM.

Relevant in P-NOM were adequate care, presence of loved ones and dying in the desired way on a location as desired, on an expected moment. Adequate care entailed unburdening of the family members by the hospital with availability of a palliative care team on weekends as prerequisite. The presence of loved ones concerned the opportunity for proxies to express their final goodbyes, where the absence of contact with the patient in the last days of life was unpleasant. And lastly the patient peaceful passing away in their own home or hospice, without development of a death rattle in the dying process. Concerning the experience with longevity, three proxies indicated that the expectation of the patients' passing within a few weeks did not match the reality of the patient surviving for longer than 3 months. One of these three participants expressed that, in retrospect, the longer lifespan would even have led to a different choice of initial treatment.

We were both worried once we decided not to operate that day; how long will this process take? Proxy 8: Proxy of patient with dementia who chose P-NOM.

DISCUSSION **Red line**

This study involved a comprehensive analysis of the perspectives of geriatric hip fracture patients and their proxies regarding SDM regarding P-NOM or OM in hip fractures. Underlying patient values, the provision of information, reasons to consider either P-NOM or OM, involvement in decision and realisation of expectations emerged as central themes.

Comparing with previous literature

Reasons to opt for P-NOM

Identified reasons for opting for P-NOM were consistent with earlier findings, where abstaining from OM was not purely driven by physical comorbidity but also by severe advanced dementia, poor functional status, and patient's wishes.²⁹⁻³¹ Novel findings supporting opting for P-NOM were the desire to reduce hip fracture pain and expected negative influence of cognitive impairment on future rehabilitation chances.

Pain management

Previous qualitative research also identified pain management as an essential factor for geriatric hip fracture patients who opted for P-NOM.¹¹ A pericapsular nerve group (PENG) block for local hip pain management was used in four of eight P-NOM patients and has shown promise for long-term pain relief in P-NOM.³²⁻³⁴ Patients and proxies indicated that mono treatment with PENG block provided less pain relief than expected. This stresses the importance of optimising provision of realistic information during SDM. The importance of pain management in hip fracture patients is underlined by its emergence in both themes Realisation of expectations and Underlying patient values.

Shared decision-making

In the theme Involvement in decision, a variation of 'sharedness' in the decision-making was reported; this aligns with an earlier recommendation to 'tailor the sharedness of the decision to the needs of patients and their family'.¹⁸ Patients and proxies reported that time to reflect in between consultations with their treating physician was valuable, this is in line with previous research, where iterative communication is suggested to encourage dialogue and focus on patients' goals and values.²² Furthermore, ŝ proxies reported a significant emotional burden associated with deciding for treatment, originating in proxies 8 not just dealing with a patient with a hip fracture but a dear human being for whom a life-changing decision must be made. Previous scholars have not yet addressed this including emotional weight, although the importance of advanced care planning in the geriatric population is stressed.^{30 35}

Uncertainty with decision-making

for uses rela The theme Realisation of expectations is characterised by a great variety between participant expectations and reality, which is in line with previous articles which state that decision-making in trauma geriatrics is accompanied by a great degree of uncertainty.¹⁸ In terms of prognosis regarding longevity, there were wide variations in life đ duration from 10 days to a year. Previous scholars attrie bute this variation to the current limitations in predicting the prognosis of patients, although the 1-year survival is consistently reported to be longer after OM when compared with P-NOM.^{10 36 37} Discrepancies between expectation and reality of longevity were perceived **E** as unpleasant, with one proxy even expressing regret regarding the decision because of a longer than expected duration of life. Although longevity appears to be longer training, and when patients receive OM, although patients and proxies attribute greater importance to quality of life, longevity might still be a factor to take into account in SDM.¹⁰¹⁴

Strengths and limitations

sim One of the study's strengths lies in its exploration of SDM from the perspectives of patients and proxies following hip fracture, marking the first study in this specific domain. The study design included various patient categories and proxies, providing insight into a unique perspective and comprehensive overview of SDM in hip fracture treatment of frail geriatric patients in acute situations. This overview highlights that the focus in SDM should be on the patient as a human being in all its versatility rather than merely on a person's medical condition (ie, holistic approach or person centred care). The study design has several possible limitations. One relative limitation arises from the involvement of proxies due to the nature of palliative treatment and the inclusion of patients with cognitive impairment. Justification for this limitation comes from the fact that the interviewed proxies were heavily engaged

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in clinical practice, reflecting typical scenarios within this patient category. The constructive epistemology of the study provides a theoretical fundamental for proxy inclusion. A third limitation stems from conducting interviews via telephone. While telephone interviews offer convenience and accessibility, there is a lack of visual cues like facial expressions and body language, which can enrich participants' responses for reflexive thematic purposes. Furthermore, differences in the time to conduct interviews across cohorts present another limitation. This discrepancy is attributed to variations in the prevalence of certain demographics among hip fracture patients, elucidating why it took longer to recruit four participants in certain cohorts. Finally, the study's context within Dutch trauma geriatric care presents a limitation. Physicians intending to apply the results in a different cultural setting may need to scrutinise whether the norms and values of their geriatric hip fracture patients align with those observed in the Dutch context.

Clinical implications

Several direct clinical implications can be derived from this study. Through all identified themes, this study underscores the critical role of the patient's and caregiver's perspectives. In this context, the healthcare provider takes on a facilitating role, encompassing the provision of information, guidance and the organisation of appropriate logistic conditions. The healthcare provider should tailor their approach to the specific individual while recognising and addressing the emotional and psychological challenges patients and proxies face. In this regard, a seated position outweighs a standing one, and professional insights based on experience are favoured over bare statistical facts. The physician should discuss the advantages and disadvantages of OM and P-NOM where deemed relevant. In which physicians should assess each patient's need for extensiveness of information and the need for discussing P-NOM. With regard to expectation management, physicians should treat burdensome topics with care and emphasise the uncertainty of topics such as cognitive decline and longevity. Furthermore, physicians should separate information provision and actual decision-making to answer to a need for reflection of patients and proxies. This could be done, for example, through multiple conversations with a moment of reflection in between. Finally, this study holds the potential not only to enhance patient satisfaction with SDM but also, more significantly, to facilitate personalised treatment choices for the individual, where the patient takes precedence over the hip fracture itself. Future research should focus on optimising the provision of information during SDM, not only for patients opting for palliative and non-OM but also for patients receiving OM.

CONCLUSION

In-depth analysis provided a unique insight into the patient and proxy perspectives in SDM for geriatric hip

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