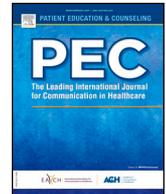




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Involving patients in undergraduate health professions education: What's in it for them?

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ABSTRACT

Objectives: Patients have become more involved in research, policy, and health professions education. They are involved in teaching students competencies required for person-centred care, but patient benefits have not received proper attention. This exploratory study identifies how patient involvement in health professions education help patients to practice self-management and shared decision-making.

Methods: Individual interviews were conducted with patients (hereafter 'experts by experience') (N = 11) who participated in the Patient As a Person Module, organised for students of health professions in The Netherlands. Additionally, one of their healthcare professionals (N = 10) and family members (N = 9) were interviewed. Directed content analysis was used.

Results: Participants reported that sharing lived experiences helped experts by experience to reflect on their preferences regarding health and healthcare, accept their changed selves, and obtain a renewed sense of purpose. They reported gaining insight into the perspectives of healthcare professionals, which yielded more equal healthcare professional-patient relationships.

Conclusions: Sharing their lived experiences with health and health care with students could help patients in practising effective self-management and participate in shared decision-making.

Practice implications: Approaching patient involvement in health professions education from both the perspectives of students and experts by experience, as opposed to students alone, optimises its societal impact.

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1. Introduction

The shift towards person-centred healthcare has been catalysed by the increasing prevalence of chronic conditions and multi-morbidity in western societies [1,2]. Chronic illness results in changes in the various roles that people fulfil in their lives, such as partner, parent, employee, and friend [3]. These changes can affect their well-being [4]. Person-centred care is a useful paradigm for treating or supporting people with chronic illnesses because it

incorporates the subjective experiences of patients and strives to realise a meaningful life for patients [2].

Delivering person-centred care requires healthcare professionals to display compassion and respect, have a holistic and tailor-made focus and establish a relationship of trust with patients to engage them in shared decision-making and self-management [2,5,6]. To foster the required competencies, professionals receive training in professional identity formation, collaboration and conflict management [7–10].

While improving professionals' skills in practising person-centred care is essential, patients too have a crucial role to play in the professional-patient interaction and in assuming ownership in living with their chronic conditions. However, patients often experience barriers to participating in their healthcare, experience inequality, and lack the belief that they can influence decision-making encounters [11]. Assuming ownership of life with chronic

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illness is hampered by the mental and social implications of chronic conditions such as loss of self-esteem, anxiety, depression and difficulties in interpersonal relationships [3,12].

Different routes can enable people with chronic conditions to exert more influence over their health i.e. empowerment [13]. Within the healthcare system, professionals can emphasize patients' responsibilities and opportunities in participating in shared decision-making [10]. In other domains, patients can empower themselves by participating in patient advocacy groups [14]. Another way in which patients could empower themselves is by sharing their experiences in undergraduate health professions education to inform future healthcare professionals about the impact of chronic disease. Patients can then use their lived experience as expertise to train healthcare professionals in delivering person-centred care [15].

The literature on how sharing experiences with students affects patients is limited. Insofar, studies regarding the benefits of patient participation in health professions education have been conducted primarily through an educational lens [16]. Research on patient outcomes has focused either on how patients can be trained to transmit their messages in a way that is instructive to students or on limiting the organisational complexity of involving patients [17]. In this study, patient involvement in health professions education is considered from the perspective of the patient. The purpose of this exploratory study is to explore how participating in health professions education adds to the empowerment of people with chronic conditions. Our research question was: In what ways does patient involvement in health professions education help patients to practice self-management and shared decision-making?

2. Methods

2.1. Study design

We used a qualitative design with semi-structured individual interviews with patients, their healthcare professionals and their family members. Since patients are experts on living with a chronic condition, they will hereafter be referred to as experts by experience (EBEs). EBEs reflected on whether, and if so, how participating in health professions education affected their knowledge, attitudes and behaviours related to shared decision-making and self-management. Their professionals and family members were **independently** asked whether they observed changes in these areas after the EBE participated in health professions education. Relevant aspects of the current study are reported using the Consolidated Criteria for Reporting Qualitative Research (COREQ) (Appendix A) [18].

2.2. Setting, participants, sampling

EBEs participated in an educational intervention called the Patient As a Person module (PAP-module). The PAP-module aims to increase students' insights into the impact of chronic conditions on the social and mental well-being of patients and their informal caregivers. Additionally, EBEs' experiences with professionals are discussed to help students gain more insight into patient preferences and the importance of a compassionate approach to patients [15]. A PAP-group consists of twelve students from various health professions and four EBEs who have three meetings together. EBEs can be accompanied by one of their informal caregivers. A more elaborate explanation of the PAP-module is provided in Appendix B. The inclusion- and exclusion criteria are displayed in Table 1. Participant backgrounds are displayed in Tables 2, 3 and 4.

To obtain diversity in terms of disease background, age, and gender, we used purposive sampling to recruit EBEs for the study [19]. All participants received an information letter and provided written informed consent. It was at the EBEs discretion to select a

professional and a family member [19]. We asked 25 EBEs to be interviewed and 11 of them consented. They suggested 10 professionals and 9 family members (N = 30), who all consented. We did not interview a family member related to EBE-1 because he did not want to burden his family with the impact of his condition more than necessary. Additionally, EBE-9 did not respond to attempts to contact her, so we did not interview one of her professionals or family members.

2.3. Data collection

We conducted all interviews (N = 30) between February and May 2020. Before the outbreak of the COVID-19 pandemic, the interviews with EBEs took place at the educational institution at which they participated (approximately 50 min each). After the onset of the COVID-pandemic, five EBEs were interviewed using video conferencing. Healthcare professionals and family members were interviewed at their workplaces, home environment or via video conferencing (approximately 40 min each). Participants received reimbursement of their travel expenses if applicable. We interviewed all participants privately and confidentially. Remarks made by EBEs were not shared with their healthcare professionals and family members to preserve confidentiality and prevent the occurrence of socially desirable answers.

SR (MSc, male, researcher) and HvdB (LLM, female, researcher) conducted all interviews. SR and HvdB have backgrounds in healthcare management and social work respectively. Both interviewers had prior experience with conducting semi-structured interviews. The interview topics for EBEs, professionals and family members were based on categorisations by Joseph-Williams, Elwyn and Edwards [11] for shared decision-making and Schulman-Green et al. [20] for self-management (Table 5). One of four additional researchers (EV, HvdB, RS, SR) was present during all interviews to observe, take notes and ask follow-up questions. Field notes were included in the analysis. Nobody else was present during the interviews. Both interviewers were involved in the PAP-module and got acquainted with some of the participants because they met during the PAP-module's editions. Participants knew HvdB and SR were on the organising board of the PAP-module. To reduce the likelihood of socially desirable answers, we assigned participants to interviewers with whom they were not familiar. As a member check, participants received an overview of the primary outcomes of their interview and were invited to comment, which one participant did. The comments of this participant were included in the analysis. No repeat interviews were conducted. All interviews were audio-taped and transcribed verbatim.

2.4. Data analysis

The data were coded deductively using directed content analysis [21]. We used self-management and shared decision-making as the two leading concepts [11,20]. Within these two leading concepts, the data were coded inductively. Subsequently, similarities and differences between the three participant groups were analysed to triangulate the data. We assigned items that did not fit the framework to new codes. NVivo 12 was used to organise and code the data. The data were separately coded by SR and HS. In three sessions, the researchers discussed discrepancies between coding schemes until consensus was reached. In the few instances in which no consensus was reached, the discrepancies were discussed with MvB, after which consensus was reached. Data saturation was reached for EBEs after nine interviews, for professionals after seven interviews and for family members after six interviews. We conducted two more interviews with EBEs after no new information came to light and completed the triads of these EBEs. Fig. 1.

Table 1
Inclusion- and exclusion criteria for all participant groups.

Experts by experience	Healthcare professionals	Family members
Have at least one chronic condition	Be a registered healthcare professional	Be in close contact with the EBE (at EBEs' discretion to decide)
Have completed at least three editions of the PAP-module	Have had at least three consultations with the EBE	
Provide consent to schedule an interview with one of their healthcare professionals		

3. Results

The results are structured in two categories: self-management and shared decision-making, each with subcategories. The subcategories under self-management relate to one's life with a chronic illness, whereas subcategories under shared decision making all relate to interactions with healthcare professionals. When EBEs and family members or professionals made remarks within the same subcategory, both were reported.

3.1. Self-management

3.1.1. More coherent illness narrative

EBEs and professionals both reported that EBEs constructed a more coherent, less emotionally loaded illness narrative by sharing their experiences in the PAP-module repeatedly.

EBE-3: "What the PAP-module definitely did for me is enabling me to share my story without getting very emotional... Now I tell my story, and that's that. I consider that to be a huge benefit for me. I could never tell that without getting tears in my eyes. It does not have the same emotional load now."

Professional-3: "I talked about it with him sometimes too. Then I tell him that I notice he does not have a lot of trouble in talking about his feelings. And then he says: "yes but that's because of the PAP-module"."

EBE-5: "Yes, because you think about it. And by sharing it, you create a clear picture in your mind."

3.1.2. Increased sense of purpose

EBEs, family members, and professionals reported that contributing to students' development and eventually more person-centred healthcare, added to EBEs' sense of purpose and self-esteem. Moreover, EBEs' increased sense of purpose gave family members a satisfying feeling.

EBE-11: "You know, my whole life, I have felt like a burden to other people. With these things in which I participate now [the PAP-module and another voluntary occupation], I am not just a burden, but I can do something meaningful for someone else. Actually, I have never felt that in such a way."

EBE-4: "Yes, I always say the PAP-module costs me energy, physically, because I have trouble with that. However, it gives me energy in return, which is mental."

Family member-4: "I think it [the PAP-module] energises her. She feels like, I might be ill, but I can still be meaningful for students and for other people who will receive their diagnoses later. Whether these people have her condition, sarcoidosis, or another severe condition. No, it gives her satisfaction. She likes doing it. How should

I say it? To be busy in some way. It might not be work, but she contributes."

3.1.3. More peer support

EBEs reported that the PAP-module allows them to provide each other peer support. This often continues after an edition of the PAP-module is finished. Family members reported similar observations about the benefits of peer support in the PAP-module, particularly since they can never fully understand what it is like for the EBE to be chronically ill. They appreciated the fact that their loved ones have mutual understanding with other EBEs and can receive peer support.

EBE-9: "It always feels like some sort of 'club'. You only see each other twice, but still, there is this connection. Some EBEs send me a message regularly. (...) It is just pleasant to chat about that with each other."

Family member-10: "Because I can never fully understand how she really feels. I can talk with her, but I can never understand what it feels like to be handicapped. So, I think it is nice to be with people that have the same [chronic condition] as she does. And that is what she [EBE-10] thinks too."

Professional-10: "So, she feels understood and doubts herself less."

Professional-3: "I think that many patients miss having someone that knows about health care to whom they can tell their story. You [students in health professions education] are all educated, and when they share their stories, I think that gives them trust. That is what I hear from EBE3, that he appreciates being able to share his story with you."

The benefits of peer support were not observed by all EBEs. Two EBEs felt that other EBEs added to a negative atmosphere by (over) emphasising their frustrations with healthcare professionals.

EBE11: "I can hardly deal with the complaining and moaning. There are some people, in certain meetings we had, who continuously repeat the same and the same."

3.1.4. Improved acceptance of illness

Professionals reported that they notice that their patients have a lot of emotions but that it is difficult to deal with all of them in the limited time of a consultation. They doubt whether these emotions are always dealt with in patients' home environments. EBE-1 wanted to limit the burden of his illness to his loved ones and therefore decided not to provide consent to an interview with a family member. The PAP-module is where he talked about and dealt with his emotions relating to being chronically ill. Some professionals believed that participating in activities such as the PAP-module can help in accepting one's illness but has a lower threshold than visiting a psychologist.

Table 2
Characteristics of experts by experience.

Expert by experience identifier	Gender	Age	Primary condition	Years with condition	Level of education	Times participated in Patient As a Person-module
Expert by experience-1	Male	60–69	Acquired brain damage	10	University of applied sciences	13
Expert by experience-2	Male	50–59	Diabetes	25	University of applied sciences	3
Expert by experience-3	Male	60–69	Acquired brain damage	12	High school	8
Expert by experience-4	Female	40–49	Sarcoidosis	10	High school	11
Expert by experience-5	Female	50–59	Chronic obstructive pulmonary disease	13	Secondary vocational education	5
Expert by experience-6	Male	60–69	Diabetes	13	University of applied sciences	8
Expert by experience-7	Female	60–69	Sarcoidosis	20	Secondary vocational education	10
Expert by experience-8	Female	40–49	Guillain-barré syndrome	5	University of applied sciences	5
Expert by experience-9	Female	20–29	Autism	Lifelong	Secondary vocational education	3
Expert by experience-10	Female	50–59	Cerebral palsy	Lifelong	High school	5
Expert by experience-11	Female	50–59	Myotubular myopathy	Lifelong	High school	6

Professional-8: "When you can structure your emotions, you can add something for others [the students in the PAP-module], and you can share your story, that is a nice piece of psychology, without needing to realise that you are doing that."

EBE-1: "For me, talking about myself, I find it good to share my story now and then. I believe it is still a way of grieving, and that is never completely done for me. And then we arrive at a heavily debated point. I think I deal with it [his illness] quite well, but I will never accept it, and this [the PAP-module] helps in that entire process."

Professional-1: "EBE1 got a heavy CVA with severe physical limitations as a result. You can see the process of acceptance, fighting against it, the grief and being able to let go of your old life. you learn how that develops. Additionally, it yields something positive because you teach students as you go."

Family members reported that EBEs integrated their illness into their lives better by listening to their bodies and prioritising their well-being.

Family member-10: "She always said 'yes' to people. Never 'no'. She always wanted to help. And with others, she saw that they sometimes did that less, which resulted in less pain. Now she is looking more at herself and says: 'Today I am not feeling like doing this. Okay, then I will not do it'."

3.2. Shared decision-making

3.2.1. Sharing lived experience with professionals

EBEs reported that they previously tried hiding their pain and discomfort to avoid being seen as a complaining person by both relatives and professionals. The PAP-module made them realise that such behaviours make it difficult to be understood. Additionally, the difficulties that students reported in communicating with patients in internships made EBEs more aware of the importance of articulating clear preferences in their consultations.

EBE-5: "You are inclined not to, raised not to show it. Stand in the hallway if you need to gasp, and when you are done, you enter the room. You always show the best version of yourself. However, there is no need to and especially not with healthcare professionals (...) If you want healthcare professionals to see you as a patient, you will have to show something. How can they understand you if you do not show it?"

EBE-9: "They [students] have internships, and they share their stories. You learn from that, you know? Look, they sometimes say: "it is so difficult when someone is not clear." I think that is the main thing I learned, to be clear."

EBEs reported gaining more ownership over their healthcare trajectories and to prioritise sharing their expertise with living with their illness more.

Professional-10: "She reflects more on herself and thinks about 'what do I need? I made an appointment here, and what do I need today? What should we focus on?' She feels freer. After all these years she feels freer. Moreover, she has noticed that when she takes more initiative, more things will change."

EBE-10: "I have had a therapist who was very knowledgeable and good, but we did not have a connection. And then I was like: 'I can use an indirect approach [to make this clear to her]', but I do not like that. So, I addressed her directly and had a conversation about that with her. You hear that from other participants too that you should just stand up for yourself. That is what I owe to the PAP-module."

Table 3

Characteristics of healthcare professionals. Professionals have the same identifier as the corresponding EBE.

Professional identifier	Gender	Age	Profession	Years of professional experience	Years of experience with the expert by experience
Professional-1	Female	50–59	General practitioner	25	18
Professional-2	Female	40–49	Nurse practitioner	17	5
Professional-3	Female	30–39	Physiotherapist	5	4
Professional-4	Male	30–39	General practitioner	5	4
Professional-5	Female	30–39	Physiotherapist	9	9
Professional-6	Female	50–59	Nephrologist	25	8
Professional-7	Female	50–59	Speech therapist	34	3
Professional-8	Female	20–29	Physiotherapist specialised in neurology	2	1
–	–	–	–	–	–
Professional-10	Male	60–69	Haptotherapist	40	25
Professional-11	Female	50–59	Home care provider	31	2

3.2.2. Equality in patient-professional relationship

EBEs and professionals reported that the conversation with their professionals became more equal. Moreover, EBEs claimed they became more aware of the perspective of the healthcare professional and the need for reciprocity in consultations.

EBE-8: "When I visited a doctor in the past, you know, you talk about your thing and want to be helped. It was a bit of grabbing as much as you can. I think that now I do not do that as much, or at least I am more aware of the fact that there is reciprocity. I have a question, but there is a human on the other side too."

Professional-8: "If you do not understand the context of the patient, it is difficult to start a conversation. You cannot have a connection with everybody, but I think that it is important that this 'arrow' goes two ways. EBE-8 understands that."

A family member reported that EBE2 had an angry or frustrated attitude towards professionals before. Participating in the PAP-module brought more understanding of professionals with milder responses as a result.

Family member-2: "Look, because of his borderline, when something does not go as it should: angry is angry. Not in stage 1 or 2 where you and I would arrive, but in stage 'boiling with rage straight away. I think that because of the conversations with fellow patients, that decreases."

EBE-2: "I have learned that a doctor is a human too. There is a human behind every doctor, who can make mistakes. We all do."

3.2.3. Assertiveness in professional-patient relationship

EBEs reported discovering that other EBEs were effective in communicating their needs towards professionals and consequently achieved better results. This inspired them to change their approach to professionals and become more proactive. Additionally, they were

more sensitive to the perspective of their professionals and learned to anticipate their responses. These findings were not universal as EBEs whose disease trajectories had already stabilized reported limited or no change in their relationships with professionals.

EBE-3: "It [the PAP-module] ... convinced me to stand up for myself."

Professional-3: "I notice that he speaks up more easily and quickly and that I do not need to keep the conversation running as much. Well, I never really had to but during the last year, the last two years, I notice that he takes more initiative."

EBE-4: "In the beginning, I went to the doctor to talk about the diagnosis. However, because of the PAP-module, what I felt before: I can come here, and that diagnosis is stable, but I feel very bad, so I do not function at all. In the past, I kept quiet. Now I tell him that I understand that it is all stable. Nevertheless, I do not function. Is there anything we can do about that? I do not expect miracles, but just a bit more balance."

4. Discussion and conclusion

This study aimed to identify how repeated participation in health professions education as an expert by experience helps patients to self-manage their lives and participate in shared decision-making.

4.1. Discussion

4.1.1. Self-management

In terms of self-management, participants reported that repeated participation in the PAP-module yielded EBEs with improved insight into their preferences, increased peer support, a more coherent and less emotionally loaded illness narrative, an increased sense of purpose, and more acceptance of their illness. EBEs disliked when

Table 4

Characteristics of family members. Family members have the same identifier as the corresponding EBE.

Family member identifier	Gender	Age	Relation with expert by experience	Participated in Patient As a Person-module as an informal caregiver
–	–	–	–	–
Family member-2	Female	50–59	Wife	No
Family member-3	Female	50–59	Girlfriend	Yes
Family member-4	Male	50–52	Husband	No
Family member-5	Female	30–39	Husband	No
Family member-6	Female	60–69	Wife	Yes
Family member-7	Male	70–79	Husband	No
Family member-8	Male	50–59	Husband	No
–	–	–	–	–
Family member-10	Female	30–39	Daughter	No
Family member-11	Female	20–29	Daughter	No

Table 5
Interview topics for all participant groups.

Experts by experience	Healthcare professionals	Family members
<ol style="list-style-type: none"> 1. Drawing an ecogram of all healthcare providers involved with the EBE 2. Reasons for participating in activities related to the condition 3. Personal outcomes of participating in PAP-module 4. (Changes in) attitudes towards healthcare providers 5. (Changes in) assertiveness towards healthcare providers 6. (Changes in) expectations from healthcare professionals 7. (Changes in) healthcare use 8. Shared decision-making 9. Concluding remarks 	<ol style="list-style-type: none"> 1. Introduction 2. Added value for experts by experience 3. (Changes in) attitudes and assertiveness towards healthcare professionals 4. (Changes in) expectations of healthcare professionals 5. (Changes in) healthcare usage 6. Shared decision-making 7. Concluding remarks 	<ol style="list-style-type: none"> 1. Introduction 2. Added value for experts by experience 3. (Changes in) attitudes and assertiveness towards healthcare professionals 4. (Changes in) expectations of healthcare professionals 5. (Changes in) healthcare usage 6. Shared decision-making 7. Impact of participation in PAP-module on family member 8. Concluding remarks

other EBEs (over)emphasised their negative experiences using a frustrated tone.

Other studies found negative outcomes for EBEs in their interactions with students. These include anxiety, dealing with unmotivated students, and being judged by students [22,23]. However, we found no studies that reported negative outcomes of EBE-to-EBE interaction. We believe it is most beneficial for both EBEs and students if EBEs participate only when they want to share not only feelings of anger but a richer pallet of experiences and reflections.

Various professionals in this study reported that participating in the PAP-module might be a low threshold alternative to visiting a psychologist for people with mental difficulties resulting from chronic illness. Patients who experience mental hardship after becoming chronically ill often believe that their emotions and behaviours are abnormal [3,12]. However, their responses might be characterized more accurately as normal responses to an abnormal situation [24]. *Normalisation* is a technique used in various psychological treatments, e.g. Cognitive Behavioural Therapy [25,26]. It is often applied in group sessions and aims to help patients realise that other people are experiencing similar emotions [23]. A unique aspect of the PAP-module is that EBEs have contact with students as well as fellow EBEs. EBEs found similarities between their emotions and those of other EBEs, which could normalise their emotions and behaviours. While participation in health professions education cannot be seen as a substitute for patients with severe mental problems, it might add to normalisation of emotions and acceptance of a changed self for patients with mild mental symptoms [25].

4.1.2. Shared decision-making

In terms of shared decision-making, EBEs reported increased awareness of the importance of sharing expertise relating to their bodies, experienced more equality in their relations with professionals and believed they became more assertive. Furthermore, they reported gaining control over their healthcare trajectories. As patients generally want to be more involved in their care than they

currently are, various methods by which professionals can invite patients to participate actively in their healthcare have been developed [27–31]. These interventions aim to improve *healthcare professionals' readiness* to practice shared decision-making. Our study provides an example of how participating in health professions education can add to *patients' readiness* for shared decision-making.

Furthermore, EBEs reported that they obtained a better understanding of the professionals' perspectives, which led to more realistic expectations of what professionals can do for them. This can be seen as an expression of the competency *perspective-taking*. Healthcare professionals receive training in this competency to effectively cooperate and deliver interprofessional care. They learn to perceive a situation from another professional's point of view. For professionals, this results in a more sympathetic and caring attitude, experiencing less moral distress and less biased views concerning other professionals [32–35]. Our study suggests that EBEs experienced similar outcomes, which indicates that they can cooperate with their healthcare professionals to a greater extent and participate in shared decision making.

4.1.3. Strengths and limitations

Our study has both strengths and limitations. A possible limitation of this study is the small number of participants. However, data saturation was reached for all participant groups. Additionally, triangulation by interviewing not only EBEs but healthcare professionals and family members as well added to the trustworthiness of the findings [36]. Another limitation of this study is that while EBEs reported benefits of participating in the PAP module in terms of self-management and shared decision-making, other factors could have influenced their developments in these areas too. Some EBEs explicitly acknowledged that it was difficult to isolate the effect of their sustained participation from other effects, such as ageing and becoming more experienced as a patient. We tried to mitigate the impact of this limitation by explicitly checking whether participants believed each outcome was attributable to participating in the PAP-

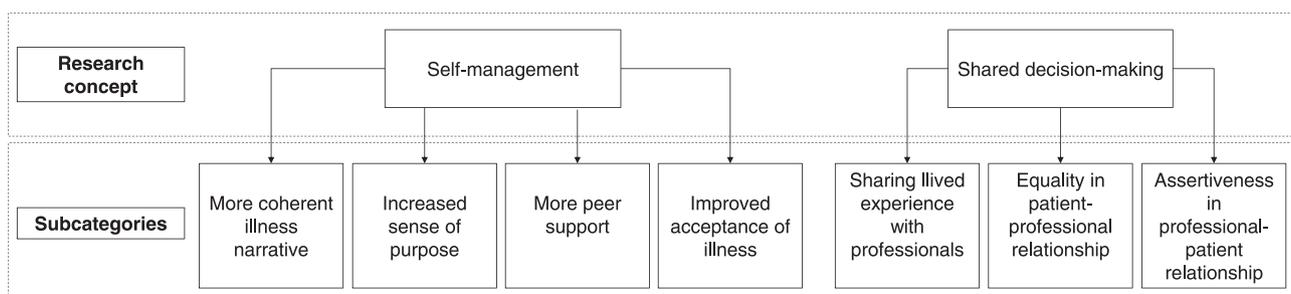


Fig. 1. Coding tree of directed content analysis [11,21].

module. Lastly, some participants were familiar with some of the researchers. To prevent the occurrence of socially desirable answers, the participants were divided in such a way that participants were not familiar with the interviewer. Additionally, all participants were explicitly asked to stick to their own beliefs and not to exaggerate benefits or trivialise negative outcomes.

4.2. Conclusion

This exploratory study shows that patients feel empowered after participating in health professions education with students and fellow EBEs. When they participate in health professions education, patients appreciate being able to contribute to students' learning, provide and receive peer support, improve their health- and healthcare-related attitudes and behaviours and accept their changed lives as a result of chronic illness.

4.3. Practice implications

Too often, patient involvement in health professions education is approached solely from the perspective of the student. The societal impact of patient involvement in health professions education can be optimized if designed with the dual aim of (1) helping students in learning competencies required for person-centred care and (2) supporting patients to practice effective self-management and participate in shared decision-making.

I confirm all patient/personal identifiers have been removed or disguised so the patient/person(s) described are not identifiable and cannot be identified through the details of the story.

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Ethics approval

This study was approved by the Maastricht University Ethics Review Committee Health, Medicine and Life Sciences (FHML-REC) under file number FHML-REC/2020/061.

Consent to participate

Informed consent to participate in this study was obtained from all participants. Providing consent to publish the findings in an academic journal was included in the informed consent procedure.

CRedit authorship contribution statement

Romme Sjim: Conceptualization, Methodology, Validation, Formal analysis, Investigation, Resources, Writing – original draft, Writing – review & editing, Visualization. **Smeets Hester Wilhelmina Henrica:** Methodology, Formal analysis, Writing – review & editing. **Bosveld Matthijs Hugo:** Conceptualization, Methodology, Writing – review & editing, Visualization. **Helene van den Besselaar:** Conceptualization, Validation, Investigation, Writing – review & editing. **Cathy Kline:** Conceptualization, Validation, Writing – review & editing. **Van Bokhoven Marloes Amantia:** Conceptualization, Supervision, Formal analysis, Validation, Writing – review & editing, Project administration.

Data Availability

The raw data of this study are available (in Dutch) upon request.

Conflicts of interest

At the time of conduct of the study, Romme and Bosveld were board members of the Patient As a Person Foundation, the organisation that developed the educational module. They received no financial remuneration for their board positions. The other authors declare no conflicts of interest concerning the authorship or publication of this article.

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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.2021.12.014](https://doi.org/10.1016/j.pec.2021.12.014).

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