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► To cite this version:

Juliette Guary, P Hebert, Arnaud Maury, Maud Le Ridant, Pierric Renault, et al.. Changes in French family medicine residents' perspectives about patient partners' participation in teaching: A qualitative study in co-facilitated practice exchange groups. Medical Teacher, 2023, 45 (11), pp.1239-1246. 10.1080/0142159X.2023.2200894 . hal-04088632

HAL Id: hal-04088632

<https://hal.science/hal-04088632>

Submitted on 13 Jun 2023

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Changes in French family medicine residents' perspectives about patient partners' participation in teaching: A qualitative study in co-facilitated practice exchange groups.

Running head: co-facilitated practice exchange groups

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Supplementary file 2: Pre-PEG focus group interview guide

Question 1: How do you see the PTTs’ role in your training as a FMR?

Question 2: What could PPTs contribute to your training?

Question 3: How do you see PPTs as partners in your training?

Question 4: What skills do you think PPTs should have?

Question 5: Are there any other comments you would like to make?

Supplementary file 3: Post-PEG focus group interview guide

Question 1: What was your experience concerning PPTs' participation in the PEG?

Question 2: What did you learn from the PPTs' participation in the PEG?

Question 3: How has the PPTs' helped you improve your skills?

Question 4: What skills do you feel are essential to become a PPT in PEGs?

Question 5: What do you think are the barriers to PPTs' participation in PEGs? In the pre-PEG focus group, FMRs mentioned six barriers (below), what do you think about them after the PEG end? Do you confirm them?

1) PPTs' subjectivity

2) Disruption of the classic doctor-patient scheme: the doctor is the knower, the patient is the doer

3) Communication with PPTs (common language)

4) Restricted speech (fear of offending PPTs)

5) Limitations of a single PPT (what can a single PPT do?)

6) External judgment (loss of the exclusive medical group feeling)

Supplementary file 5: Additional verbatim Perspectives of French family medicine residents about the participation of patient partners in teaching.

A. Strong expectations by FMRs concerning PPTs’ participation

1) Strong expectations in a favorable context

‘It would be nice to have the patient's perspective. To have their input and then to be able to readjust our practice, and what they think about our approach to them. To know whether there are things we can improve, things like that, and have a little more perspective on our practice.’ (R11; F2)

‘Patients have a big place, not in theoretical teaching, but rather in teaching the doctor-patient relationship; they also are going to bring us what they expects from us. To have the patients’ vision, it's important to have their opinion.’ (R1; F1)

2) FMRs’ expectations about PPTs’ contribution

‘I thought it was a good practical application and a good way to convey the skills we can see in general practice.’ (R7; F5)

‘It really helped to bring something extra into the discussion. And it allows you to get the patient’s feedback, which you don't get in medical practice.’ (R3; F5)

B. FMRs’ perspective changes about PPTs’ intervention

1) Profile of the intervening PPTs

‘The problem with that is that it's also very dependent on the patient, how they feel and so on. I'm not sure it's very applicable. It depends so much on the individual.’ (R2; F1)

‘The advantage, compared with what R16 was saying, is that he [i.e. the PPT] was a member of a discussion group, so he was certainly telling us about his experience, but also about the feedback he had from other patients and other members of his discussion group.’ (R17; F3)

2) Modalities of PPTs’ intervention

‘It's kind of silly to exclude the PPT by starting a discussion focused on clinical points. It happened from time to time.’ (R16; F6)

"Sometimes I've thought, 'ah here's [PPT's first name], I shouldn't forget to re-launch the discussion." (R16; F6)

C. Barriers to PPTs' involvement in PEG facilitation

1) Some of the barriers initially expressed were removed ...

'I wonder whether our way of talking may be restrained sometimes with a patient-teacher. Things that we wouldn't necessarily say to each other or with a patient next door. Things that we don't want them to hear.' (R9; F2)

'Trying to explain it to her in our words. We didn't have to change them much because she knew a lot of things.' (R14; F4)

2) Other barriers persisted at the PEG end

'We just have to tell her that, maybe, and she should "improve" [her intervention]. In the sense that sometimes there are biomedical issues and we need tips. And she should learn not to be always at the center of the stage' (I22; F6)

'It's true that the PPT's role has not been discussed much. We don't know whose experience he reported, whose opinion. Is it his own opinion or the opinion of several people? Yes, maybe he explained that at the beginning, but we don't know where he was trained

Supplementary file 1	
Consolidated criteria for reporting qualitative research (COREQ): 32-item checklist	
Item	Guide questions/description
Domain 1: Research team and reflexivity	
<i>Personal characteristics</i>	
1. Interviewer/facilitator	Focus groups were conducted by three researchers (E. Allory, A. Maury, P. Hebert). J.Guary was observer during all the focus groups.
2. Credentials	E. Allory, PhDs, MD P. Hebert, pedagogical engineer A. Maury, MD J. Guary, MD
3. Occupation	At the time of the study, J.Guary was a resident in family medicine, University of Rennes 1. E.Allory was an associated professor at the department of general practice, University of Rennes 1. A.Maury was a junior lecturer at the department of general practice, University of Rennes 1. P.Hebert was a pedagogical engineer, University of Rennes 1
4. Gender	J. Guary and P.Hebert are women. E.Allory et A.Maury are men.
5. Experience and training	J. Guary is a doctor in family medicine. She followed a course by a senior researcher, expert in qualitative research, during her residency. E.Allory, P.Hebert et A.Maury had a strong experience in focus groups animation.
<i>Relationship with participants</i>	
6. Relationship established	Participants were residents from the same department in the university as the authors and could know the researchers.
7. Participants' knowledge of the interviewer	Participants were informed about the study prior to the focus group through an e-mail by the principal researcher.
8. Interviewer's characteristics	Interviewers introduced themselves as students (J.Guary), teachers (E.Allory, A.Maury) or pedagogic engineer (P.Hebert), with the aim to improve the quality of resident's curriculum.
Domain 2: Study design	
<i>Theoretical framework</i>	
9. Methodological orientation and theory	Researchers used a reflexive thematic analysis as theoretical background.
<i>Participants' selection</i>	
10. Sampling	Participants were all the students who participated to the practice exchange groups (PEG) between june and october 2020.

11. Method of approach	Participants were invited by e-mail, using the contact information available at the family medicine department.
12. Sample size	In total, 26 family medicine residents participated: 25 in the pre-PEG focus groups and 23 with the post-PEG focus groups
13. Non-participation	In total, 30 family medicine residents were initially approached. The reasons for non-participation of the residents were unknown.
<i>Setting</i>	
14. Setting of data collection	The pre-PEG focus groups were conducted by videoconference, due to the health context related to Covid 19. The post-PEG focus groups were conducted immediately after the last PEG, in the same place (meeting room of a multiprofessionnal health centre (2 focus groups), teaching room at the university (1 focus group)).
15. Presence of non-participants	Only the interviewer, the principal researcher and the participants were present at the focus groups.
16. Description of sample	The study sample was residents who were realising the PEG between june and October 2020. More detail is available in table 1.
<i>Data collection</i>	
17. Interview guide	The interview guide for the pre-PEG focus groups was developed based on a literature review performed at the beginnng of the study, then adapted after two exploratory interviews with 2 family medicine residents who experienced PEG in the previous internship and finally validated with 2 co-authors (E.Allory, P.Hebert). The interview guide for the post-PEG focus group was derived from the pre-PEG focus group and discussed in the research team.
18. Repeat interviews	No repeat interview was planned or carried out.
19. Audio/visual recording	All interviews were digitally recorded with a smartphone and transcribed by the observer (J.Guary)
20. Field notes	Field notes were made throughout the interviews by the observer (J.Guary)
21. Duration	The duration of the interviews was between 45 to 66 Minutes, with an average duration of 58 minutes.
22. Data saturation	In reflexive thematic analysis, the saturation is not an issue to discuss. We interviewed all the residents who participants of the PEG.
23. Transcripts returned	Transcripts were not returned to the participants
Domain 3: Analysis and findings	
<i>Data analysis</i>	
24. Number of data coders	The principal researcher (J.Guary) and an expert in qualitative research (E.Allory) did the coding. In case of

	a conflict, a third researcher (P.Hebert) was participating to the resolution.
25. Description of the coding tree	Authors met regularly to discuss interviews, coding and themes.
26. Derivation of themes	Themes were partly identified from the literature and partly derived from the interview data.
27. Software	No software was used. The analysis was done manually. The Xmind® software was used to help us in the treatment of the data and Excel® was used to organised the content of the data.
28. Participant checking	Participants were not invited to check the analysis
Reporting	
29. Quotations presented	Quotations from participants were used and assigned individual numeric codes to respect the interviewees' anonymity (e.g. Ix; Fy)
30. Data and findings consistent	There was consistency between data and findings.
31. Clarity of major themes	Major themes were generated, presented, and illustrated with quotes.
32. Clarity of minor themes	The main minor themes were analysed, presented and illustrated with quotes.

Changes in French family medicine residents' perspectives about patient partners' participation in teaching: A qualitative study in co-facilitated practice exchange groups.

Abstract

Purpose: The patient partner in teaching method is progressively developing for clinical training in France. Practice exchange groups (PEG) co-facilitated by patient partners in teaching are used during the training of family medicine (FM) residents. This study explored the FM residents' perspectives about patient partner in teaching's participation in co-facilitated PEGs and how they changed over time.

Students and method: In 2020, qualitative focus groups were carried out with 26 FM residents before and after a 5-month intervention based on monthly PEGs co-facilitated by patient partners in teaching. A reflective thematic analysis of the focus group interviews was performed according to Braun and Clarke's approach.

Results: FM residents supported patient partners in teaching's facilitation role and had high expectations concerning their contribution to the development of their skills and competencies. They expected patient partners in teaching to bring their individual experience and also a collective knowledge. Some limitations mentioned by FM residents disappeared over time, such as the loss of the medical group feeling among physicians, while others persisted and required pedagogical support targeted to FM residents before PEG initiation.

Conclusion: This study shows the good acceptance of patient partners in teaching by FM residents in the context of PEGs. Attention should be paid to make FM residents aware of patient partners in teaching's missions before their introduction.

Keywords: patient participation; medical education; medical student; general practice; qualitative research.

Practice points:

- In France, patient partners in teaching are recent in medical training and few studies evaluated their acceptance by family medicine (FM) residents in practice exchange groups (PEG).
- FM residents expressed strong expectations concerning the participation of patient partners in teaching in PEGs for developing their skills and competencies.

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- 33 • Before PEG initiation, FM residents appreciated the experiential knowledge contribution
- 34 by patient partners in teaching; at the PEG end, patient partners in teaching were
- 35 perceived as real facilitators and full group members.
- 36 • The limitations initially expressed by FM residents about the loss of the medical group
- 37 feeling in the PEG had disappeared at the PEG end, when the patient partner in teaching
- 38 was seen as a full group member.
- 39 • The involvement of patient partners in teaching in FM residents’ training requires real
- 40 pedagogical support before the training session, including clarifying their pedagogical
- 41 role.

Introduction

Patient partners in teaching: context, definition, and implications in health education

Faced with the increasing number of people living with a chronic disease in recent years, a reorganization of health systems centred on the patients and their expectations is necessary to meet the new healthcare needs (OECD 2021; World Health Organization 2021). In this context, since 2010, Montreal University (Canada) has developed a conceptual model in which a real partnership is established between healthcare providers (HCPs) and patients. By taking into account the patient skills and experiential knowledge acquired by living with a disease, this model strengthens the consideration of the patients' needs by HCPs (Karazivan et al. 2015). This model has been expanded to include also the healthcare professionals' education.

Many studies have reported the value of involving patient partners in teaching in health education. According to a 2019 systematic literature review, patient partners in teaching are accepted by undergraduate medical students and contribute to develop a patient-centred approach (Gordon et al. 2019). Patient partners in teaching also improve the medical students' empathy and communication with patients, and facilitate the students' understanding of living with a disease. In addition, patient partners in teaching increase the students' assurance and confidence (Dijk et al. 2020) (Lalani et al. 2019). A qualitative study on 28 English medical students found that patient partners in teaching helped students to remember lessons through a better contextualization and application of theoretical knowledge (Jha et al. 2009). Moreover, patient partners in teaching rebalanced the dialogue between patients and physicians, helping students to better take into account the patients' skills.

Integration of patient partners in teaching in the training of family medicine residents in France

In France, family medicine (FM) residents train for three years and must follow theoretical training courses at university one day per week. Among these courses, practice exchange groups (PEGs) allow anchoring their training in the framework of competence-based learning. PEGs were initially developed for HCPs' continuing education, and consist of collaborative teaching that contributes to skill development (Beyer et al. 2003). PEG main objective is the adoption of a reflective approach by FM residents to integrate collectively produced knowledge into their practice (Brabant et al. 2019). PEG facilitation is usually done by FM teachers. Recently, PEG co-facilitation by patient partners in teaching and FM teachers has been implemented in several

French medical schools. A quantitative study on FM residents' perspective after one year of participation in a PEG co-facilitated by patient partners in teaching and FM teachers highlighted a positive and useful experience, particularly due to the patient partners' specific contributions (Aires et al. 2019).

However, few studies evaluated FM residents' perspective changes concerning the acceptance and integration of patient partners in teaching. Indeed, the introduction of patient partners in teaching as new teaching team members could create resistance and hamper FM residents' knowledge acquisition (Piaget 1971). The objective of this qualitative focus group study was to determine FM residents' perspectives about the participation of patient partners in teaching in PEGs and how these perspectives changed over time.

Students and methods

Training context

At Rennes University, FM residents' training includes PEGs (9-11 FM residents per PEG), once a month. Each session lasts 3 hours, during which FM residents take turns in presenting a narrative of a complex and authentic situation (NCAS), inspired from clinical situations personally experienced during their family medicine training. After each NCAS, the group discusses the identified problems, and everyone brings their opinion and experience. In 2019, the first three proposed PEGs were co-facilitated by one FM teacher and one patient partner in teaching. These patient partners in teaching are volunteers with a stabilized chronic disease (n=2) or caregivers of a person with a chronic disease (n=1). They were recruited mainly via networks of healthcare users' associations. The three patient partners in teaching received pedagogical training about their role in the PEG by the FM teacher coordinator. Their expected role was to co-animate the PEG and to offer their experiential knowledge (individual or collective) when they thought it was relevant. The pedagogical objectives of their integration in the PEG were to lead FM residents to consider them as partners in their training and to benefit from their experiential knowledge. A two-hour preparatory teaching session is offered to the FM residents before the PEG start to explain the concept of facilitators and the PEG organization.

101 ***Study design***

102 The consolidated criteria for reporting qualitative research (COREQ) checklist was used to
103 prepare our manuscript (supplementary file 1) (Tong et al. 2007).

104 ***Participants***

105 Focus groups were conducted with 5-10 voluntarily participating FM residents per focus group
106 (total n=26 FM residents), recruited from the three co-facilitated PEGs. Their characteristics
107 are described in Table 1.

108 ***Data collection***

109 A pre-PEG focus group was carried out for each PEG (F1, F2, F3) by videoconference (June
110 2020) before the two-hour preparatory teaching session. At these focus groups, FM residents
111 did not have any contact with the PEG facilitators. Afterwards, FM residents attended one PEG
112 per month for five months. Then, three post-PEG focus groups (F4, F5, F6) were conducted
113 face-to-face (October 2020). The focus group facilitators were two FM teachers (AM and EA)
114 and an educational engineer (PH).

115 The interview guides for the pre- and post-PEG focus groups were developed by three authors
116 (EA, JG and PH) following the literature recommendations (Kallio et al. 2016). They were
117 written based on a non-systematic review of the literature and two exploratory interviews with
118 FM residents who previously participated in co-facilitated PEGs. The interview guide consisted
119 of open-ended questions to explore the FM residents' perspectives on the participation of patient
120 partners in teaching in their training, their expectations about the contributions and skills of
121 patient partners in teaching, and possible barriers to the participation of patient partners in
122 teaching. At the PEG end, researchers also asked the FM residents about changes in the main
123 barriers they identified in the pre-PEG focus groups (Supplementary files 2 and 3).

124 ***Data analysis***

125 Focus group interviews were recorded using a digital voice recorder with the participants'
126 consent, and they were fully transcribed. Each focus group lasted between 45 and 66 minutes
127 (mean: 58 minutes). The interview transcriptions were anonymized. A thematic inductive
128 reflective analysis was performed following the six steps described by Braun and Clarke (Braun
129 and Clarke 2006). After data familiarization and iterative reading of the interviews, two
130 researchers (EA and JG) independently and openly coded all transcribed interviews. The coding
131 was done in two stages: first the pre-PEG (F1, F2, F3) and then the post-PEG (F4, F5, F6) focus

group interviews. Codes were integrated in an Excel® spreadsheet. At the end of the coding process, virtual maps using the XMind® software were generated to identify themes that were shared and reviewed by the two researchers. In case of conflict, the intervention of a third researcher (PH) allowed its resolution. Then, themes were defined and named. The final phase of the analysis was the production of an analysis report (Kiger and Varpio 2020).

Ethical and regulatory aspects

The database was declared to the French national commission for information technology and liberties (CNIL) on April 19, 2020. The study project was approved by Rennes university hospital ethics committee on May 10, 2020 (N°20.44).

Results

From the analysis of the transcribed interviews, three main categories were identified, each containing two themes (Table 2).

Strong expectations by FM residents concerning the participation of patient partners in teaching

Strong expectations in a favourable context

Before the PEG start, most FM residents had high expectations about the involvement of patient partners in teaching in their training. They said that they had little previous contact with patient partners in teaching and identified gaps in their training that could be filled by their intervention.

‘It could be very relevant to introduce the patient-teacher much earlier in our education.’
(R3; F5)

However, some FM residents did not have any specific expectation concerning patient partners in teaching and found difficult to imagine their role. A co-facilitator role was mentioned by some FM residents before the PEG start. FM residents wanted patient partners in teaching to evaluate their NCAS and give constructive feedback. This expectation was stable at the PEG end. The positive pre-PEG expectations were in line with the FM residents’ patient-centred approach in their practice.

‘That’s the goal, to stop with paternalistic medicine and move towards a more patient-centred medicine.’ (R20; F3)

At the PEG end, these perspectives remained stable.

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3 161 *FM residents' expectations about the contribution of patient partners in teaching*

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5 162 First, before the PEG start, FM residents expressed the wish to hear about the experiential
6 163 knowledge of patient partners in teaching.

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9 164 'Patients are going to live with the disease for a long time, therefore they understand it
10 165 and know it better than we do.' (R1; F1)

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13 166 FM residents also expected patient partners in teaching to improve their skills in accompanying
14 167 patients, including knowledge about community resources, such as patient organizations.
15 168 Besides experiential knowledge, FM residents validated the patient partners in teaching's input
16 169 to develop their skills. First, FM resident thought that patient partners in teaching could
17 170 strengthen their patient-centred practice. By promoting patient empowerment, working on
18 171 empathy, and improving communication skills, patient partners in teaching could be an asset in
19 172 learning the doctor-patient relationship.

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22 173 'For many things, they bring the patient's point of view to us. They especially teach us
23 174 to refocus on the patient.' (R20; F6)

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26 175 Second, FM residents expected patient partners in teaching to contribute to better understand
27 176 their role in the community. FM residents thought that the participation of patient partners in
28 177 teaching would promote the development of a more ethical medical approach and help them to
29 178 define their professional role.

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32 179 'I would love to have the patients' perspective first, and know what they expect, what
33 180 they want...what we can bring to them [as healthcare providers].' (R4; F1)

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36 181 At the PEG end, these perspectives remained stable. In addition, FM residents reported that
37 182 patient partners in teaching contributed to develop their reflexivity and stimulated their desire
38 183 to continue their training. FM residents whose pre-PEG expectations were mainly related to the
39 184 provision of experiential knowledge were the least satisfied.

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42 185 'We don't have to take everything she [i.e. the patient partner in teaching] said. We can
43 186 criticize what she says. And then it makes us think and it makes us do some research.'
44 187 (R9; F6)

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47 188 *FM residents' perspective changes about the intervention of patient partners in*
48 189 *teaching*

49 190 *Background of the patient partners in teaching*
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3 191 In the pre-PEG focus group, FM residents questioned several dimensions of the patient partners'
4 192 background on which their legitimacy as teachers was based. For some FM residents, the
5 193 knowledge brought by patient partners in teaching was subjective and incompatible with a
6 194 credible teacher's role. FM residents expected patient partners in teaching to express collective
7 195 knowledge on the behalf of a group of patients. At the PEG end, these perspectives remained
8 196 stable, but some FM residents were disappointed when patient partners in teaching spoke less
9 197 about their personal experience. Some FM residents referred also to their own experience of
10 198 living with a disease as a way of weighing the contribution of patient partners in teaching.

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15 199 'The patient side, I had it myself. So there were many things that the patient partner in
16 200 teaching brought to you, but not necessarily to me. [...] Indeed, I expected other things
17 201 from the PEG, not just the patient-doctor relationship and putting patients in their
18 202 context.' (R19; F6)

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24 203 Second, at the PEG start, FM residents defined the patient partners' background also in function
25 204 of their skills that were mostly pedagogical. FM residents expected patient partners in teaching
26 205 to be caring, communicative, listening and open-minded, and also engaged in a constructive
27 206 educational process. They were expected to discuss their own experience and not to judge the
28 207 FM residents' work or attitudes.

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33 208 At the PEG end, FM residents seemed to have become aware of the different roles of patient
34 209 partners in teaching in their training. Previous experiences of interventions by patient partners
35 210 in teaching (e.g. testimonials) were mentioned by some FM residents. The initial expectations
36 211 of some FM residents were rooted in the perspective of an expert teacher who would teach
37 212 something that they needed to learn by heart. At the PEG end, FM residents appreciated and
38 213 broadened their perspective on the specific role of patient partners in teaching (more as
39 214 facilitators).

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42 215 "I think she was trained to facilitate a patient education group. Because she also had
43 216 some mastery of group facilitation. (R17, F6)

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50 217 *Modalities of the intervention by patient partners in teaching*

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53 218 Before the PEG, most FM residents did not see them as the main PEG facilitator, rather as a
54 219 partner to the FM teacher (the lead facilitator). This opinion remained stable after the PEG. At
55 220 the PEG end, FM residents identified factors in favour of patient partners' integration in their
56 221 teaching, particularly the PEG pedagogical method. The debates within the PEG allowed
57 222 everyone to find their place and the knowledge was co-constructed within the group.

223 'There was no hierarchy, no doctor-patient dichotomy in the PEG, so much that I forgot
224 he was a patient. To me he was a PEG teacher.' (R1; F5)

225 In addition, most FM residents felt that structuring the sessions with NCAS presentations helped
226 to better integrate the patient partner in teaching. The problems identified by FM residents in
227 the NCAS were first related to clinical issues and then to relational or communicational issues,
228 which made relevant the participation of a patient partner in teaching. FM residents felt that
229 when the emphasis was on clinical aspects, the patient partner in teaching's participation was
230 hindered. Overall, FM residents highlighted the PEG collective responsibility in integrating the
231 patient partner in teaching.

232 ***Barriers to the involvement of patient partners in teaching in PEG facilitation***

233 *Some of the barriers initially expressed were removed...*

234 Most of the barriers initially stated by FM residents about patient partners in teaching
235 disappeared at the PEG end. Sometimes, during the post-PEG focus group, FM residents did
236 not even remember that barriers were discussed during the pre-PEG focus group. First, FM
237 residents reported the good integration of the patient partner in teaching in the PEG. The
238 apprehension about the medical group feeling loss initially expressed disappeared in favour of
239 the perceived pedagogical contribution. Initially, FM residents were worried that they would
240 have to restrain their speaking for fear of offending the patient partner in teaching. This
241 disappeared over time while a relationship of trust and partnership was established. According
242 to FM residents, this partnership was facilitated by the absence of a care relationship between
243 patient partners in teaching and FM residents. The PEG became a separate unit in which patient
244 partners in teaching were considered like any other participant.

245 'He's part of the group, so he's not an outsider, he's like us. [...] He is included in the
246 group that we have built." (R4; F5)

247 Also, FM residents initially expressed the fear of not finding a common language for discussing
248 with patient partners in teaching. Its disappearance at the PEG end could be explained by several
249 factors. First, the health literacy level of patient partners in teaching was appropriate for their
250 full participation in the PEG. Also, the FM residents' efforts to facilitate communication with
251 the patient partner in teaching was seen as an opportunity to develop a patient-centred approach.

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3 252 'I think patient partners in teaching can completely change the way we talk to each other.
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5 253 [...] It's going to force us to better explain medical data and try to make the whole
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7 254 audience understand, including the patient.' (R17; F3)
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9 255 Finally, FM residents who were initially concerned that patient partners in teaching would
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11 256 disrupt their usual patient-doctor relationship scheme found that patient partners in teaching
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13 257 made them better understand the patient's experience of living with a disease and move towards
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15 258 a care partnership.
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17 259 'When it is in the context of a chronic disease where patients are very expert in their
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19 260 illness... the usual patient-doctor relationship is disrupted. You have to be able to adapt
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21 261 to the new relationship.' (R21; F3)
22 262 *Other barriers persisted at the PEG end*
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24 263 First, the FM residents perceived that the role of patient partners in teaching as PEG facilitators
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26 264 was not well defined. They cited the recent development of PEG as a reason. Depending on the
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28 265 PEG, patient partners in teaching seemed to have taken either a leadership role in the
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30 266 facilitation, an equal role with the FM teacher, or a more secondary role. Therefore, FM
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32 267 residents thought that the lack of a precise definition of the patient partner in teaching's roles
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34 268 could lead to disappointment. For instance, some FM residents did not like when the patient
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36 269 partner in teaching was the main facilitator because they expected a more biomedical approach
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38 270 in the PEG.
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40 271 'Because sometimes [the FM teacher] had very interesting answers but we had run out
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42 272 of time or were cut [by the patient partner in teaching] who wanted to go back to the
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44 273 relationship. Whereas sometimes what we're looking for is just little tips and tricks about
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46 274 medical things.' (R18; F6)
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48 275 A second barrier that persisted after the PEG was the fear that the 'genuine naivety' of the
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50 276 patient partner in teaching might disappear by coming into contact with medical students, or by
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52 277 receiving training for their participation in the PEG.
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54 278 'But she must not be trained too much on the medical side. So that she stays... They
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56 279 must continue saying their little things. Indeed, these little things may seem silly little
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58 280 questions to them, but we put them all in perspective.' (R18; F6)
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281 Discussion

282 Overall, this qualitative focus group study found that the interviewed FM residents had
283 favourable perspectives about the integration of patient partners in teaching in PEGs. FM
284 residents' expectations concerning patient partners in teaching's participation were strong and
285 focused on developing their skills. FM residents wanted patient partners in teaching to speak
286 on behalf of all patients, with a dedicated time in the PEG. Many of the initial perceived barriers
287 about the integration of patient partners in teaching had disappeared at the PEG end (e.g. the
288 group feeling loss). Conversely, others persisted, especially the patient partner in teaching's
289 place as facilitator, thus requiring pedagogical adjustments.

290 *Discussion of the results*

291 *The development of the patient-partnership in teaching seems easy*

292 Our study shows that the intervention of patient partners in teaching was considered as a
293 learning opportunity by FM residents. FM residents reported improved communication skills,
294 empathy and patient-centeredness, consistent with previous literature reviews (Gordon et al.
295 2019; Lalani et al. 2019; Dijk et al. 2020). A factor that facilitated the acceptance of patient
296 partners in teaching was the FM residents' awareness of the importance of the patient
297 partnership in care. Thus, experience with care seems to be a factor that facilitates the
298 acceptance of patient partners in teaching. Faced with the change in learning paradigms, FM
299 residents showed a shift in their perspectives about the role of patient partners in teaching.
300 Initially, FM residents expected to receive experiential knowledge in the form of a testimonial
301 by patient partners in teaching about their life with a chronic disease. This corresponds to level
302 three (out of six) in the taxonomy of patient engagement in teaching proposed by Towle and
303 colleagues: patient partners in teaching share their experience in the framework a faculty-
304 directed curriculum (Towle et al. 2010). As the sessions progressed, FM residents discovered
305 that patient partners in teaching could also be real group facilitators, moving to level four of
306 this taxonomy: patient partners in teaching are involved in teaching and evaluating. Thus, the
307 perceived and desired level of commitment and partnership of patient partners in teaching by
308 FM residents increased over time.

309 *Barriers to changes and levers for teaching improvement*

310 Before the PEG, FM residents described a preference for teaching carried out only by medical
311 community members. The group feeling in PEGs has been described as necessary among peers
312 (Brabant et al. 2019). After the PEG with a patient partner in teaching, FM residents'

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3 313 perspectives evolved about this barrier. Thus, more than professional identity (physician or
4 314 patient partner), it was the identity as PEG participants that prevailed. However, other barriers
5 315 persisted at the PEG end. For example, FM residents were unconvinced about the legitimacy of
6 316 patient partners in teaching as teachers/facilitators, and expected them to be trained in pedagogy
7 317 and other areas. The importance of the teacher's credibility to enable pedagogical input has
8 318 been previously highlighted (Renard and Roussiau 2007). Thus, providing pedagogical training
9 319 to patient partners in teaching and let FM residents know about it at the PEG beginning could
10 320 help to integrate patient partners in teaching as full-fledged teachers. Fiquet et al proposed to
11 321 provide clear information to patient partners in teaching on the pedagogical objectives and the
12 322 modalities of their intervention, as we did in our study (Fiquet et al. 2022). This
13 323 recommendation, also made by Romme et al, could take the form of collective peer-to-peer
14 324 support to enhance their participation (Romme et al. 2020). Mentoring by 'patient coaches'
15 325 could also be considered for training new patient partners in teaching (Karazivan et al. 2015).
16 326 Indeed, mentoring by experienced patient partners in teaching could help to maintain the
17 327 authenticity of patient partners in teaching (Cheng and Towle 2017). In addition, FM residents
18 328 linked the legitimacy of the intervention by patient partners in teaching to their capacity to
19 329 represent a group and to transmit collective knowledge. This was also described by Gardien
20 330 who spoke of 'a recurrent doubt as to the relevance or usefulness of experiential knowledge.
21 331 This mistrust regularly takes the form of questioning their objectivity' (Gardien 2019, p. 105).
22 332 In our focus groups, FM residents confirmed a contradiction observed also in other HCPs
23 333 (Renedo et al. 2018). In this previous study, HCPs wanted patient stories that promoted the
24 334 development of their professional knowledge. However, after listening to personal stories, they
25 335 devalued them and said they were looking for patients who spoke less about their own
26 336 experience. The interviewed FM residents also devalued personal stories and considered their
27 337 own experience of the healthcare system as valuable as that of patient partners in teaching.
28 338 Overall, the difficulty in visualizing the patient partner in teaching's role may be explained by
29 339 the fact that the identity of this new function remains ambiguous in the literature (Codsi et al.
30 340 2021).
31
32 341 Nevertheless, two levers for improvement emerged. First, FM residents thought that PEG co-
33 342 facilitation should be improved. According to Bleakley and Bligh, the patient-centred approach
34 343 cannot be developed with students without the 'mirror' or role model presented by the patient
35 344 (Bleakley and Bligh 2008). In this context, the FM teacher-patient partner in teaching pairing
36 345 is presented as a learning facilitator. FM teachers would be the leader facilitator in the PEG,
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while patient partners in teaching would bring their own expertise. On the basis of our findings, optimization would also require a better preparation of FM teachers and patient partners in teaching. For instance, joint training of patient partners in teaching and FM teachers before the PEG could improve the facilitator roles' distribution (Romme et al. 2020). A second lever may be to improve FM residents' knowledge about the role of patient partners in teaching before a PEG. Educational science authors agree on the importance of communicating well at the beginning of a course module about its pedagogical objectives and modalities (Biggs 1996). By making the pedagogical intentions explicit, learners will give meaning to the teaching, which is a motivational factor (Viau et al. 2004). However, this communication step needs to be precisely organized. Indeed, after an intervention focused on health democracy, French FM residents said that they could not understand well the purpose of PEGs that included patient partners in teaching (Gross et al. 2017). The patient partner in teaching concept represents a profound cultural shift and its integration by all FM residents will take time.

Strengths and Limitations

This study increases the available data on the FM residents' perspectives about the role of patient partners in teaching in their training. The study longitudinal approach allowed assessing the perspective changes over time of FM residents who had little or no previous contact with patient partners in teaching before the pre-PEG focus group. Previous contacts with patient partners in teaching's in the framework of their medical training seemed to influence the initial perspectives of some FM residents about the involvement of patient partners in teaching in their training.

This study has several limitations. First, the pre-PEG focus groups were by videoconference due to the COVID-19-related public health measures, and this may have limited the contribution by some interviewed FM residents. Second, data collection by focus groups, some of which were facilitated by an FM teacher, may have limited the expression of negative perspectives by FM residents. The final richness of the focus groups allowed weighing this limitation. On the other hand, FM residents showed a memory bias, especially during the post-PEG focus groups. Indeed, the barriers to the integration of patient partners in teaching mentioned in the pre-PEG focus groups were summarized to the FM residents at the post-PEG focus group, but they did not remember mentioning them. Lastly, this study was carried out in a context of double novelty for FM residents: patient partners in teaching's integration in their training and PEGs that are based on competence-based learning. Indeed, in France, medical student training is mainly

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3 378 based on traditional large group teaching. Therefore, the changes in their perspectives at the
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5 379 PEG end could be explained by this specific situation.
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8 380 **Conclusion**
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10 381 Our study illustrates the FM residents’ interest in the participation of patient partners in teaching
11 382 in PEGs. Most of the barriers mentioned by FM residents before the PEG disappeared after the
12 383 involvement of patient partners in teaching. To address the barriers that remained after the PEG,
13 384 the PEG format might be adjusted, particularly the co-facilitation and the contribution by patient
14 385 partners in teaching during the PEG. A longitudinal follow-up of FM residents would allow
15 386 better understanding the long-term impact of patient partners in teaching in their training.
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22 387 **Acknowledgments**
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24 388 The authors thank all FM teachers and the patient partners in teaching who co-facilitated the
25 389 practice exchange groups. The authors thank Elisabetta Andermarcher for providing medical
26 390 writing and editorial assistance in the preparation of this article. This article is supported by the
27 391 French network of University Hospitals HUGO (‘Hôpitaux Universitaires du Grand Ouest’).
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32 392 **Disclosure statement**
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34 393 *Disclosure of interest*
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36 394 The authors report no conflicts of interest. This study was not funded and was conducted by
37 395 researchers employed through the university of Rennes 1.
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43 397 **Data availability statement**
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45 398 All data generated or analysed during this study are included in this published article and its
46 399 supplementary information files.
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499 **Tables**

500 Table 1: Participants’ characteristics

Pseudonym	Gender	Age (years)	Year of residency in June- October 2020	Focus groups
R1	woman	24	1	F1 F5
R2	man	25	1	F1
R3	man	27	2	F1 F5
R4	woman	26	2	F1 F5
R5	woman	25	1	F1 F5
R6	woman	26	1	F1
R7	man	25	1	F1 F5
R8	man	25	1	F2 F4
R9	man	26	2	F2 F4
R10	woman	25	1	F2 F4
R11	woman	25	1	F2 F4
R12	woman	27	2	F2 F4
R13	woman	25	1	F2

				F4
R14	woman	26	2	F2 F4
R15	woman	25	1	F2 F4
R16	man	25	2	F3 F6
R17	man	26	2	F3 F6
R18	woman	25	2	F3 F6
R19	woman	26	2	F3 F6
R20	woman	25	1	F3 F6
R21	man	25	1	F3
R22	woman	26	2	F3 F6
R23	woman	27	2	F3 F6
R24	woman	24	1	F3 F6
R25	woman	26	1	F2 F4
R26	man	26	1	F4

502 Table 2: Categories, themes, sub-themes and their changes after the PEG

Categories	Themes	Sub-themes before the PEG	Changes after the PEG
Strong expectations by FM residents concerning the participation of patient partners in teaching	Strong FM residents' expectations	Strong positive pedagogical expectations	Stable
		Comparison with the patient-centred approach in their care	Stable
	Contribution of the patient partners in teaching	Experiential knowledge	Stable
		Skill enhancement	Stable
		Better understanding their role	Stable
			The patient partner seems to improve the FM residents' reflexivity
FM residents' perspectives about the intervention of patient partners in teaching	Background of patient partners in teaching	Individual subjective knowledge is expected	Stable, expectation of more personal experience by the patient partner in teaching
			Some FM residents valued their own experience as patients
		Expectation of collective knowledge	Stable
		Expectation of pedagogical skills by the patient partner	Stable. Discovery of their different potential roles in their training.

		Teacher as an expert	Teacher as a group facilitator
	Modalities of the intervention of patient partners in teaching	FM teacher as the lead facilitator	Stable
			Factors that promote integration: <ul style="list-style-type: none"> - Discussions within the PEG - NCAS structuring the PEG - Collective responsibility of the PEG in the patient partner's integration
Barriers to the involvement of patient partners in teaching in PEG facilitation	Removed barriers		No memory of the barriers discussed in pre-PEG focus group
		Medical group feeling loss	Patient partner in teaching considered as member of the group
		Restrained language	Relationship of trust and partnership with the patient partner in teaching
		No common language between FM students and patient partner in teaching	Appropriate literacy level of the patient partner in teaching and development of a patient-centred communication
		Disruption of their patient-doctor relationship scheme	Move towards a care partnership
	Persisting barriers	Teaching role not well defined	Stable
		Expectations of a biomedical approach in the PEG	Stable. The presence of a patient partner in teaching limited the biomedical input
		Genuine naivety might disappear	Stable