PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	An observational and prospective study: Evaluation of beliefs and representations of chronic treatments of polymedicated patients hospitalized in a vascular medicine and surgery department
AUTHORS	Kotry, Dounia; Saillard, Justine; Bonsergent, Marion; Volteau, Christelle; Benichou, Antoine; Prot-Labarthe, Sonia; HUON, Jean-François

VERSION 1 – REVIEW

REVIEWER	Elif Ertuna Ege Universitesi, Clinical Pharmacy
REVIEW RETURNED	05-Jun-2023

GENERAL COMMENTS	Manuscript ID: bmjopen-2023-073250 Evaluation of beliefs and representations of chronic treatments of patients hospitalized in medicine and vascular surgery The manuscript is generally well written. My remarks and suggestions for changes/revisions are listed below: Line 55: Please check the names of compliance categories for consistency. Are the terms "poorly compliant" and "low compliance" used for expressing the same category? Similarly are the terms "non-compliance" in the table and "non-observant" in the footnote express the same category? The same for "good compliance" and "good observers". If so, please amend these discrepancies throughout the text including the abstract, main text and tables. Line 82: Please consider using malignancies instead of cancerous diseases? Line 91-93: Please add the appropriate reference for this sentence. “According to WHO…..” Line 96-97: Please check for wording/English. “Among the factors….” Lines 114-116: No analyses were made regarding polymedicated patients or results of polymedication. Please explain the rationale for giving this information in the methods section or delete this sentence. Line 121: The type of the consent should be specified, eg., written informed consent Line 144: Chi-squared test Line 147: Please state the level of significance (P value) for statistical significance in the material and methods section. Line 175: Please state the test used for this correlation. Is this Pearson's r square? The medication numbers and the belief in importance of treatment are quantitative, so I believe that this correlation is tested with something like Spearman's or Pearson's correlations. However, these test are not specifically identified in the

	methods section. Please add the test used for assessing correlations between two quantitative data to the methods section of the manuscript. Line 196-197: Are these drugs classes also among the least prescribed? It would be more enlightening if this data is given also as a percentage of the actual prescription rate. This might allow us (the readers) to more easily understand the knowledge of patients about their medications. You might also consider giving the data about prn medications in the paragraph starting at line 204 (When patients were asked about their treatments, a large proportion did not spontaneously mention the drugs they took "if needed", in particular analgesics such as paracetamol or symptomatic drugs such as antihistamines). Line 198-200: The comment above is also valid for this paragraph. If possible, please give the actual prescription rates of the said drug classes to make it easy to compare with the knowledge of the patient. Line 201: Are the drug classes with the highest rate of incorrect indications presented here the incorrect indications as reported by the patients"? If the sentence is written as is, I understand that the indications of the drugs are wrong, but I guess the authors are talking about the fact that the patients misunderstood or did not know the indications of their drugs. Please consider changing the sentence to avoid misunderstanding. Line 223: Is this r square? Please check the Discussion section for English, easy reading and flow. Line 248: Is this "need score" or "necessity score". Although the meaning is the same, please use the same term throughout the manuscript for consistency. Line 262: please delete either relation or correlation to avoid duplication. Line 284: The authors state that the indications for cardiovascular drugs were known the least by the patients. Does these statistics include the new drugs added to the patient's drug therapy regimen near the time of admission? As this study is conducted in vascular surgery department, it could be possible that some cardiovascular drugs are recently added to the patient's medication regimen before admission to prepare or stabilize the patient before surgery. If acutely prescribed cardiovascular drugs are included in this data patient's lack of knowledge might be confounded by the fact that they might not have received a medication counselling for the newly added drugs yet. This should also be discussed in this section. Line: 294-296: "Given the average number of medications taken by the patients in our study, more than 9, it seems normal that this number is low in our results." This sentence is hard to follow, please try to express it differently. Line 299: This doesn't need to be written as a new paragraph, the same topic continues to be discussed. Line 52, table 1: please correct the typo "frends" to "friends" Table 1: Please check for typo. "ATC class of drugs"? Table 1: If you're using the WHO ATC classification "digestive tract and metabolism (A)" should be changed as "Alimentary tract and metabolism (A)". Table 1 footnotes: Farmer is listed among the occupations, so there is no need to include farmers in this footnote. Please only state the other occupations constituting 3%. Table 1 footnotes: H is already stated in the table, so no need to include class H in the footnote. Table 3, regarding significant P values: I guess ANOVA or Kruskal-

	Wallis is used for statistics here. Please state which post-test is used in the methods section. Table 3 footnotes: The explanation about the belief scoring is given in the methods section. There is no need for duplication. Please delete the two sentences in the footnote. Table 3 footnotes: Please check the names of compliance categories for consistency as explained earlier, and amend these discrepancies throughout the text including the abstract, main text and tables. Table 3 footnotes: Authors could give the classification for the GIRERD score in the methods section, and delete the explanation here. Line 514-515, Example: There is no need to give an example here. This weak negative correlation should be and is already been given in the results section. The reviewer provided a marked copy with additional comments. Please contact the publisher for full details.

REVIEWER	Nicola Anderson University of Birmingham, Centre for Patient Reported Outcomes Research
REVIEW RETURNED	14-Jun-2023

GENERAL COMMENTS	Thank you to the editors and the authors for the opportunity to review and comment on this manuscript entitled: Evaluation of beliefs and representations of chronic treatments of patients hospitalized in medicine and vascular surgery This is an important area of study that requires careful examination. I enjoyed reading the manuscript which overall was clear and well written, however, I have several comments which I believe if addressed could improve the paper. 1. Your title could reflect the study design and your study population more clearly, which incidentally is described in slightly different ways throughout the manuscript. You use the word 'representations' when I wonder if you really mean 'perceptions' i.e., the way in which something is regarded, understood, or interpreted. Also, it would be helpful at the outset to understand exactly what you mean by treatment – are you just evaluating beliefs and attitudes towards medications or do you include interventions associated with lifestyle changes? 2. Are you able to adjust the key words? the system might not permit the suggested additions which could be: Adherence, polypharmacy, multiple long term conditions 3. Why did you choose this method (questionnaire) – did you consider other approaches such as qualitative semi-structured interviews? 4. Abstract – again I felt your population was not clearly defined in this cross-sectional descriptive study. 5. Would appreciate a full spelling of acronyms the first time they appear i.e., questionnaire names – were the questionnaires interviewer administered or self-reported – the term hetero-questionnaires is not commonly used in English language journals so it will need defining exactly what you mean by this term. 6. Heavy use of the work 'compliance' in the abstract, which some clinicians see as an outdated term, preferring 'adherence', which is less passive and has two forms – intentional and unintentional. 7. As you note, there has been study of these issues already and point to your population as the novel aspect of this paper – I felt

	this could be strengthened, what are the potential impacts of this work 8. You recruited 100 participants – your sampling strategy was unclear, did you have explicit inclusion/exclusion criteria, and you did not collect ethnicity data – why not? 9. You stated in the limitations that hospitalization might affect responses – is there a theoretical basis for this, and is this covered in the discussion? 10. There appear to be some references missing i.e. page 6 lines 78-80 WHO 11. Was the global questionnaire developed specifically for this study? How were patients asked to rate importance of medications? Were any instructions given i.e. in terms of drugs helping them live longer or prevent side effects? I note that some patients were unable to rank importance. 12. Was there any patient, public involvement in this study? i.e., co-design of global questionnaire if created for this study, review of study materials etc 13. Page 8 line 125 – do you mean reconciliation? 14. I am unclear what you mean by 'each modality' on page 9 line 143 and was unclear on the statistical analysis section overall – exactly which tests did you use? 15. Care should be taken over the language used to report the questionnaire data results – using words like 'wondered' could suggest over interpretation. 16. Would appreciate an expansion on your key findings – correlation between compliance and which particular beliefs – knowledge of this might inform future education plans? 17. You use the term 'good observers' but I cannot see where this term is defined 18. Can poor compliance be fully explained by the number of medications taken, as you seem to suggest in the discussion, or are other mechanisms at work? You do discuss this later in the discussion but note there are theoretical models/frameworks that have been developed associated with medication adherence i.e. MAM – Medication Adherence Model – Johnson M. J. (2002). The Medication Adherence Model: a guide for assessing medication taking. Research and theory for nursing practice, 16(3), 179–192. https://doi.org/10.1891/rtnp.16.3.179.53008 Peh, K.Q.E., Kwan, Y.H., Goh, H. et al. An Adaptable Framework for Factors Contributing to Medication Adherence: Results from a Systematic Review of 102 Conceptual Frameworks. J GEN INTERN MED 36, 2784–2795 (2021). https://doi.org/10.1007/s11606-021-06648-1 19. References need to be converted to BMJ Open format.

VERSION 1 – AUTHOR RESPONSE

Response to reviewer.
The authors gratefully acknowledge the Reviewers for their constructive comments and help in revising this manuscript.
Please see below the point-by-point response to the Reviewers comments.

The manuscript is generally well written. My remarks and suggestions for changes/revisions are listed below:
The authors would like to thank Reviewer 1 for his comments.

Q1.
Line 55: Please check the names of compliance categories for consistency. Are the terms "poorly compliant" and "low compliance" used for expressing the same category? Similarly are the terms "non-compliance" in the table and "non-observant" in the footnote express the same category? The same for "good compliance" and "good observers". If so, please amend these discrepancies throughout the text including the abstract, main text and tables.

We thank the reviewer for this remark. We have duly incorporated the suggested changes throughout the manuscript. The terms “medication adherence” and “adherent” have been employed.
Q2.
Line 82: Please consider using malignancies instead of cancerous diseases?
We thank the reviewer for this remark. Changes were made accordingly.
Q3.
Line 91-93: Please add the appropriate reference for this sentence. “According to WHO…..”
We thank the reviewer for this remark. Changes were made accordingly.
Q4.
Line 96-97: Please check for wording/English. “Among the factors….”
We change the sentence by: “The representations of treatments are factors that influence therapeutic adherence.”
Q5.
Lines 114-116: No analyses were made regarding polymedicated patients or results of polymedication. Please explain the rationale for giving this information in the methods section or delete this sentence.
We have modified the methodology to make it clearer. In fact, the threshold of five medications as a reference to designate polymedicated patients was established as inclusion criteria.
Q6.
Line 121: The type of the consent should be specified, eg., written informed consent.

We thank the reviewer for this remark. Changes were made accordingly.

Q7.
Line 144: Chi-squared test

We thank the reviewer for this remark. Changes were made accordingly.
Q8. And Q9:
Line 147: Please state the level of significance (P value) for statistical significance in the material and methods section.

Line 175: Please state the test used for this correlation. Is this Pearson's r square? The medication numbers and the belief in importance of treatment are quantitative, so I believe that this correlation is tested with something like Spearman's or Pearson's correlations. However, these test are not specifically identified in the methods section. Please add the test used for assessing correlations between two quantitative data to the methods section of the manuscript.

Indeed, the methodology described was not clear. We have gone back to the drawing board and made the necessary changes to respond to your comments Q8 and Q9.

This correlation is tested with Spearman’s correlations.

Q10 and Q11.
Line 196-197: Are these drugs classes also among the least prescribed? It would be more enlightening if this data is given also as a percentage of the actual prescription rate. This might allow us (the readers) to more easily understand the knowledge of patients about their medications. You might also consider giving the data about prn medications in the paragraph starting at line 204 (When patients were asked about their treatments, a large proportion did not spontaneously mention the drugs they took "if needed", in particular analgesics such as paracetamol or symptomatic drugs such as antihistamines).

Line 198-200: The comment above is also valid for this paragraph. If possible, please give the actual prescription rates of the said drug classes to make it easy to compare with the knowledge of the patient.

The figure is proportional to the prescription rate. For example, out of 10 prescriptions for ophthalmic drugs, only 2 patients mentioned them.
We have modified this part in our results:
“Among the most prescribed drug classes, the most cited were anti-thrombotics (64.7% of the 116 prescriptions), beta-blockers (55.9% of the 59 prescriptions), drugs acting on the renin angiotensin system (49.3% of the 67 prescriptions) and anti-diabetics (46.8% of the 62 prescriptions).”

“When patients were asked about their treatments, a large proportion did not spontaneously mention the drugs they took "if needed", in particular analgesics (26,8 % of the 82 prescriptions) such as paracetamol or symptomatic drugs such as antihistamines (28,7% of the 14 prescriptions).”

Q12.
Line 201: Are the drug classes with the highest rate of incorrect indications presented here the incorrect indications as reported by the patients"? If the sentence is written as is, I understand that the indications of the drugs are wrong, but I guess the authors are talking about the fact that the patients misunderstood or did not know the indications of their drugs. Please consider changing the sentence to avoid misunderstanding.

We thank the reviewer for this remark. Indeed we are talking about the fact that the patients misunderstood or did not know the indications of their drugs. We change the sentence by: “The drug classes for which patients demonstrated inadequate knowledge regarding their indications primarily included cardiology drugs (60%), anti-anemic preparations (48%), diuretics (47.5%), beta-blockers (45.8%) and lipid-lowering drugs (45%).”

Q13.
Line 223: Is this r square?

It's not r square. This is also a Spearman correlation coefficient.

Q14.
Please check the Discussion section for English, easy reading and flow.

We thank the reviewer for this remark. Changes were made accordingly.

Q15.
Line 248: Is this "need score" or "necessity score". Although the meaning is the same, please use the same term throughout the manuscript for consistency.

The changes were made accordingly. It was a “necessity score”.

Q16.
Line 262: please delete either relation or correlation to avoid duplication.

We thank the reviewer for this remark. Changes were made accordingly.
Q17.
Line 284: The authors state that the indications for cardiovascular drugs were known the least by the patients. Does these statistics include the new drugs added to the patient's drug therapy regimen near the time of admission? As this study is conducted in vascular surgery department, it could be possible that some cardiovascular drugs are recently added to the patient's medication regimen before admission to prepare or stabilize the patient before surgery. If acutely prescribed cardiovascular drugs are included in this data patient's lack of knowledge might be confounded by the fact that they might not have received a medication counselling for the newly added drugs yet. This should also be discussed in this section.

Thank you for raising this question. The statistics provided in our study exclude newly prescribed medications administered during the hospitalization period. Our analysis is focused exclusively on the medications that patients were already taking on a regular, chronic basis before being admitted to the hospital.
The rationale behind this approach is that patients might not be familiar with the names and indications of medications introduced during hospitalization. Consequently, to ensure the accuracy of our findings pertaining to patients’ knowledge, we limited our evaluation to the medications listed in the patient’s admission reconciliation. This adjustement was made in the methodology section to enhance clarity.

Q18.
Line: 294-296: "Given the average number of medications taken by the patients in our study, more than 9, it seems normal that this number is low in our results." This sentence is hard to follow, please try to express it differently.

We thank the reviewer for this remark. Changes were made accordingly.
Q19.
Line 299: This doesn't need to be written as a new paragraph, the same topic continues to be discussed.

Thank you for this remark. We have removed the line feed.

Q20.
Line 52, table 1: please correct the typo "frends" to "friends"

We thank the reviewer for this remark. Changes were made accordingly.
Q21.
Table 1: Please check for typo. "ATC class of drugs"?

We thank the reviewer for this remark. Changes were made accordingly.
Q22.

Table 1: If you're using the WHO ATC classification "digestive tract and metabolism (A)" should be changed as "Alimentary tract and metabolism (A)".

We thank the reviewer for this remark. Changes were made accordingly.
Q23.
Table 1 footnotes: Farmer is listed among the occupations, so there is no need to include farmers in this footnote. Please only state the other occupations constituting 3%.

We thank the reviewer for this remark. Changes were made accordingly.
Q24.
Table 1 footnotes: H is already stated in the table, so no need to include class H in the footnote.

We thank the reviewer for this remark. Changes were made accordingly.
Q25.
Table 3, regarding significant P values: I guess ANOVA or Kruskal-Wallis is used for statistics here. Please state which post-test is used in the methods section.

Indeed, in this table, each continuous variable is compared between the three groups of patients using ANOVA or Kruskall-Wallis tests. There are no post-tests in this case.

Q26.
Table 3 footnotes: The explanation about the belief scoring is given in the methods section. There is no need for duplication. Please delete the two sentences in the footnote.

We thank the reviewer for this remark. Changes were made accordingly.
Q27.
Table 3 footnotes: Please check the names of compliance categories for consistency as explained earlier, and amend these discrepancies throughout the text including the abstract, main text and tables.

We thank the reviewer for this remark. Changes were made accordingly. We used the term adherence.
Q28.
Table 3 footnotes: Authors could give the classification for the GIRERD score in the methods section, and delete the explanation here.

We have made modifications to the methods section to incorporate the GIRERD score.

Q29
Line 514-515, Example: There is no need to give an example here. This weak negative correlation should be and is already been given in the results section.

We thank the reviewer for this remark. Changes were made accordingly.

Reponses to reviewers:
Reviewer: 2

The authors gratefully acknowledge the Reviewers for their constructive comments and help in revising this manuscript.
Please see below the point-by-point response to the Reviewers comments.

Q1.
Your title could reflect the study design and your study population more clearly, which incidentally is described in slightly different ways throughout the manuscript. You use the word ‘representations’ when I wonder if you really mean ‘perceptions’ i.e., the way in which something is regarded, understood, or interpreted. Also, it would be helpful at the outset to understand exactly what you mean by treatment – are you just evaluating beliefs and attitudes towards medications, or do you include interventions associated with lifestyle changes?

We thank Reviewer 2 for this relevant suggestion. As requested, the title was modified for:
“An observational and prospective study: Evaluation of beliefs and representations of chronic treatments of polymedicated patients hospitalized in medicine and vascular surgery”.
We only assess patients' beliefs about their medication. These are medications that patients take chronically and that they had prior to hospitalization. To enhance clarity, we refined the description of our study population.
We have chosen to use the term representation because this is what we assessed via the BMQ questionnaire. In fact, the two terms are very similar. In our view, each individual has his or her own knowledge, ideas and explanations about health. This is what defines representations. These are linked to the patient's behavior, cultural and social background, educational background, and professional activity. That's why we took these data into account when drawing up the questionnaire.
Q2.
Are you able to adjust the key words? The system might not permit the suggested additions which could be: Adherence, polypharmacy, multiple long term conditions

Thank you for this relevant remark. Unfortunately, we couldn't write our own keywords. We had to select keywords from a list.
Q3.
Why did you choose this method (questionnaire) – did you consider other approaches such as qualitative semi-structured interviews?

This comment is pertinent. For this study, we prioritized the quantitative aspect in order to highlight the issues of medication adherence, and patients' knowledge and beliefs about their treatments. A mixed (quanti and quali) study would have been too time-consuming in terms of researcher and patient time, but the results we obtained will enable us to explore patients' representations of their treatments in greater depth using a qualitative methodology based on interviews. Indeed, for a future study, this will enable us to produce an interview guide adapted to our previous results.
Q4.
Abstract – again I felt your population was not clearly defined in this cross-sectional descriptive study.
We have modified the description of our population to make it clearer in the manuscript: “Adult polymedicated (i.e minimum of 5 chronic treatments) patients hospitalized in the surgical and vascular medicine department were included after application of the exclusion criteria”.
Q5.
Would appreciate a full spelling of acronyms the first time they appear i.e., questionnaire names – were the questionnaires interviewer administered or selfreported – the term hetero-questionnaires is not commonly used in English language journals so it will need defining exactly what you mean by this term.

The authors thank the Reviewer 2 for this relevant remark. For acronyms, we have made changes in the manuscript. The term “hetero-questionnaire” has been modified to “interviewer administered”.
Q6.
Heavy use of the work ‘compliance’ in the abstract, which some clinicians see as an outdated term, preferring ‘adherence’, which is less passive and has two forms –

intentional and unintentional.
We couldn't agree with you more. We have replaced the word “compliance” by “adherence” in the manuscript.
Q7. As you note, there has been study of these issues already and point to your population as the novel aspect of this paper – I felt this could be strengthened, what are the potential impacts of this work
In the literature, we found few studies on patients with multiple medications. The majority of studies on the subject included patients with a single pathology.
Patients' perceptions of one pathology in particular will not be the same as those of patients with multiple pathologies (e.g. diabetes, glaucoma, hypertension, polyarthritis, etc.) We wanted to know whether, for patients, one pathology was more important than another.
Patients hospitalized in a vascular medicine and surgery department are polypathological (diabetes, hypertension, hypercholesterolemia, etc.) and therefore good representatives of this polymedicated population.
We also know that patients with multiple medications have more problems with adherence.
With this population, we were able to study the importance that patients attached to each of their treatments, taking all chronic pathologies together, as well as their beliefs, their knowledge about their medication and then their level of adherence.

Q8.
You recruited 100 participants – your sampling strategy was unclear, did you have explicit inclusion/exclusion criteria, and you did not collect ethnicity data – why not?
We were able to include 100 patients in our study thanks to the study period. This was a feasible number in practice, given patient recruitment. Indeed, this was a 28-bed ward. We did not calculate the number of subjects required, but the sample was large enough to be representative of the population and to enable us to carry out statistics.
Patients included were hospitalized in the vascular medicine and surgery department. We choose to study these patients because they were polymedicated patients taking an average of 9 medications. In this department, we carry out medication reconciliation and found that some patients were unaware of their medication (name, dosage, etc.).
We therefore chose the following inclusion criteria:
- Patients over 18 years of age
- Patients hospitalized in surgery and vascular medicine
- Patients with a minimum of 5 habitual treatments
The choice of a minimum of 5 habitual treatments was based on the definition of polymedication most frequently found in the literature.
Non-inclusion criteria were:
- Patients who refused to participate
- Patients unable to participate in an interview (cognitive impairment, language barrier)

We were unable to collect ethnic data, as French regulations do not allow this.
Q9.
You stated in the limitations that hospitalization might affect responses – is there a theoretical basis for this, and is this covered in the discussion?
Thank you for your very pertinent comment. It was through discussions with the doctors that we came to this limit in our study. In fact, the patients hospitalized in the vascular medicine and surgery department are patients who, for the most part, undergo major operations. Most patients are tired and in a stressful environment. In the end, the patient may not have been in a position to answer questions about their knowledge.
This was a point of reflection that we had when we were developing our project.
Q10.
There appear to be some references missing i.e. page 6 lines 78-80 WHO

We thank the reviewer for this remark. Changes were made accordingly.

Q11.
Was the global questionnaire developed specifically for this study? How were patients asked to rate importance of medications? Were any instructions given i.e. in terms of drugs helping them live longer or prevent side effects? I note that some patients were unable to rank importance.

The global questionnaire was specifically developed for this study.
We asked patients to try to establish a score between 0 and 10 for each medication. Considering 0 as a drug not at all important for them and 10 as indispensable for them. We did not give any other indications, such as the prevention of side effects.
Some patients were unable to assess the importance of the drugs. They felt that if the doctor had prescribed them, they must be important. They couldn't put a figure on the importance of their drug. We were able to highlight the trust they placed in their doctor.

Q12.
Was there any patient, public involvement in this study? i.e., co-design of global questionnaire if created for this study, review of study materials etc

No patient was involved in the design or methodology of this study. This is an important point for our future work.

Q13.
Page 8 line 125 – do you mean reconciliation?

Thank you for his remark. Yes, we mean reconciliation. We change in the manuscript the word.

Q14.
I am unclear what you mean by ‘each modality’ on page 9 line 143 and was unclear on the statistical analysis section overall – exactly which tests did you use?

We completely agree with you about the methodology. We've rewritten it to make it clearer.

Q15.
Care should be taken over the language used to report the questionnaire data results –
using words like ‘wondered’ could suggest over interpretation.
In the answers to the questionnaire that the patient could give, there was the term "uncertain". This meant that the patient could not give an opinion on the question. They were neither for nor against. To avoid confusion, we have decided to remove the phrase. Thank you for your comment.
Q16.
Would appreciate an expansion on your key findings – correlation between compliance and which particular beliefs – knowledge of this might inform future education plans?

We change our key findings by:

“Knowing what patients believe will enable us to develop appropriate actions and teaching tools to improve adherence, knowledge and, consequently, drug management.”

Q17.
You use the term ‘good observers’ but I cannot see where this term is defined.

We thank the Reviewer for this remark. We have used the term "good observer", but it is ultimately the term "good adherent". The term good observer has been modified.

Q18.
Can poor compliance be fully explained by the number of medications taken, as you seem to suggest in the discussion, or are other mechanisms at work? You do discuss this later in the discussion but note there are theoretical models/frameworks that have been developed associated with medication adherence i.e. MAM – Medication Adherence Model –Johnson M. J. (2002). The Medication Adherence Model: a guide for assessing medication taking. Research and theory for nursing practice, 16(3), 179–192. https://doi.org/10.1891/rtnp.16.3.179.53008
Peh, K.Q.E., Kwan, Y.H., Goh, H. et al. An Adaptable Framework for Factors Contributing to Medication Adherence: Results from a Systematic Review of 102 Conceptual Frameworks. J GEN INTERN MED 36,
Thank you for this remark. Poor compliance can be explained by several factors.
In our study, the number of medications may explain the poor compliance score on the GIRERD questionnaire among the patients we interviewed. Indeed, to the question: "Do you think you have too much medication? The majority answered yes, and they were directly no longer considered "good adherent", even though they were taking their medication well.
We believe that poor compliance may also be due to the fact that patients are not aware of their treatment and do not know why they are taking it.Therefore, the assessment of adherence to medication must be supplemented by other means.
We fully agree with the two articles concerning the different factors that can impact the level of adherence medication. Thank you for these two references, which we have included in the discussion.
Q19.
References need to be converted to BMJ Open format.

Thanks for the comment, we change the format of the references in the manuscript.

VERSION 2 – REVIEW

REVIEWER	Elif Ertuna Ege Universitesi, Clinical Pharmacy
REVIEW RETURNED	01-Sep-2023

GENERAL COMMENTS	Please check with the editorial team to ensure that adding an author name is permitted at this point of submission process. Aside from this, the manuscript can be accepted after some very minor corrections. Line 69-70: This sentence seems incomplete. Why is this a strength of your study, please elaborate and also please change “adherence medication” to “medication adherence”. Line 109, 237, 352 and 384: Please check and correct the departments’ name, which is used differently in the text; “surgical and vascular medicine department” and “vascular medicine and surgery department”. Line 340-341: The meaning of the following sentence can not be

	understood; “With enhanced information, efficacious, and secure for their well-being.”

REVIEWER	Nicola Anderson University of Birmingham, Centre for Patient Reported Outcomes Research
REVIEW RETURNED	18-Sep-2023

GENERAL COMMENTS	Thank you for the opportunity to review the revised version of this manuscript and thank you for attending to all the queries raised during my initial review. The revised paper reads clearly and whilst I appreciate the document shows highlighted changes, tracked changes would have been a good way to show both original and revised text/content. I have some minor suggestions for the revised paper: 1. The bullet point strengths and limitations could be clarified and improved using some of the material highlighted in the discussion section - currently the bullet point restates the study aims and what the study is about - neither of these are aims or objectives. 2. Please check the reference on line 77, page 4 3. Oral consent - This is quite unusual when a face to face consent process has been undertaken - was it not feasible to get written evidence of consent or is it common to have oral consent only in France? 4. Please state in the text that the global questionnaire was developed specifically for this study 5. Page 6 Line 146 should it read - 'Depending on the normality or not of the distribution' 6. Page 14 lines 340-341 'With enhanced information, efficacious, and secure for their well-being' seems like a fragment of a sentence

VERSION 2 – AUTHOR RESPONSE

REVIEWER 1

Q1.

Line 69-70: This sentence seems incomplete. Why is strength of your study, please elaborate and also please change “adherence medication” to “medication adherence”.

The Strengths and Limitations section was completely modified as follows:

- This study is pioneering in its examination of the representation and beliefs associated with chronic treatments within a vascular medicine and surgery department.

- We employed validated and widely accepted questionnaires to assess beliefs and measure medication adherence.

- Nonetheless, it is crucial to acknowledge that this study was conducted at a single center, which may limit the broader applicability of the findings.

- It is worth noting that medication adherence questionnaires often tend to overestimate adherence, underscoring the importance of employing multiple measurement methods.

Q2.

Line 109, 237, 352 and 384: Please check and correct the departments' name, which is used differently in the text: "surgical and vascular medicine department" and "vascular medicine and surgery department".

Thank you for your comment. We have harmonized in the manuscript and therefore used the terms: "Vascular medicine and surgery department".

Q3.

Line 340-341: The meaning of the following sentence cannot be understood: "With enhanced information, efficacious, and secure for their well-being".

We agree with your comment. The sentence didn't make sense, it was a typo. We have changed the sentence in the manuscript to: "A better information would mean a more effective and safer treatment for the patient".

REVIEWER 2

Thank you for the opportunity to review the revised version of this manuscript and thank you for attending to all the queries raised during my initial review. The revised paper reads clearly and whilst I appreciate the document shows highlighted changes, tracked changes would have been a good way to show both original and revised text/content.

The authors would like to thank Reviewer 2 for his comments.

Q1.

The bullet point strengths and limitations could be clarified and improved using some of the material highlighted in the discussion section – currently the bullet point restates the study aims and what the study is about – neither of these are aims or objectives.

The Strengths and Limitations section was completely modified as follows:

- This study is pioneering in its examination of the representation and beliefs associated with chronic treatments within a vascular medicine and surgery department.
- We employed validated and widely accepted questionnaires to assess beliefs and measure medication adherence.
- Nonetheless, it is crucial to acknowledge that this study was conducted at a single center, which may limit the broader applicability of the findings.
- It is worth noting that medication adherence questionnaires often tend to overestimate adherence, underscoring the importance of employing multiple measurement methods.

Q2.

Please check the reference on line 77, page 4

Thank you for this comment. Changes were made accordingly.

Q3.

Oral consent- This is quite unusual when a face to face consent process has been undertaken- was it not feasible to get written evidence of consent or is it common to have oral consent only in France?

According to French law governing human research, in the context of a non-interventional study, written consent from patients is not required. That is why we collected consent orally after giving them an information letter with full details of the study. We also left them our contact details so that they could get back to us if they ever wished their information not to be considered for the study.

Q4.

Please state in the text that the global questionnaire was developed specifically for this study.

Thank you for this comment. Changes were made accordingly.

Q5.

Page 6 line 146 should it read – “Depending on the normality or not of the distribution”.

The correction was made.

Q6.

Page 14 lines 340-341: “With enhanced information, efficacious, and secure for their well-being” seems like a fragment of a sentence.

We agree with your comment. The sentence didn't make sense, it was a typo. We have changed the sentence in the manuscript to: “A better information would mean a more effective and safer treatment for the patient”.