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Title	Clinical care gaps and solutions in diabetes and advanced chronic kidney disease: a patient-oriented qualitative research study
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Reviewer 1	Maoliosa Donald
Institution	University of Calgary, Department of Nephrology
General comments (author response in bold)	Comment 1a. Methods: For patient partner involvement (page 6) I would suggest adding sex of patient partners involved (as per GRIPP2 checklist). **Response 1a. We have now included the sex of our patient partners on page 6 of the methods.** Comment 1b. For data collection (page 7) could you clarify/describe briefly the "open and flexible interview guide for semi-structured interviews"? How were questions developed - based on previous literature, by research team members? An overview of the interview guide as supplementary material (i.e. domains of questioning) would be of benefit for the reader? **Response 1b. Our Interview Guide was developed by research investigators based upon a review of the literature. This is specifically stated in our methods section on page 6. We have now provided the guide in as a Supplementary File.** Comment 1c. For data analysis (page 8) the following would provide more clarity for the reader. Who completed the analysis, you mention "investigators" and "team", suggest listing researchers' initials. Also describing the analysis more clearly, was content analysis or thematic analysis done? Vaismoradi et al, 2013 describes these concepts well. **Response 1c. We have now used initials to indicate the team members who participated in each stage of the analysis. We have also reviewed Vaismoradi's paper and have stated that we used thematic analysis to analyze our data in the methods section on page 6.** Comment 2a. Results: For participants a statement summarizing of how many focus groups and interviews were completed (page 8). How many participants in each focus group? Also, you mentioned that you were purposefully sampling to include ethnicity. Can you report on this (page 9 or Table 1)? **Response 2a. On page 7 of the results, we state the number of focus groups and 1:1 semi-structured interviews we carried out. We have also indicated the ethnicity of those included in Table 1.** Comment 2b. For findings you mention seven themes under "care challenges", but it looks like there are eight? Please clarify. Also, Figure 1 is visually appealing, however suggest describing how care challenges fit with Figure 1 three visuals, "life before diabetes, life with diabetes, life with diabetes and CKD". **Response 2b. Thank you for pointing this out. There were in fact eight themes, and we have corrected this. The section editor suggested removing Figure 1 and so we have done so.** Comment 3 a. Interpretation: How does Figure 1 fit with interpretations? **This Figure illustrated the impact of diabetes and CKD on patients' lives. Given the topic of the current manuscript was their care challenges and solutions, we have removed this figure.**
Reviewer 2	Alexandre Grégoire
Institution	Centre de recherche du CHUM, Centre of Excellence on Partnership with the Patients and the Public (CEPPP)

General comments (author response in bold)	Comment 1. Lay summary: You talk about "the development of patient-friendly diabetes care programs": maybe you should briefly explain what is this program. **Response 1. By patient-friendly, we mean patient-centered. We have changed this term throughout.** Comment 2 Method: "...as full research partners. Our patient partners were involved in all aspects of our study design, conduct, analysis, and knowledge translation." In my work and as a patient partner, I see that what interests readers more and more is the How to. So I think it would be good for you to add more about the details of the involvement (See attached PDF document for more details). **Response 2. We have now illustrated with initials, which of our team members were involved with each step of this study.** Comment 3. Patient Partner Involvement: How you identify and recruit those patient partners? It's part of the How to. I think it would be interesting to know what was your criteria for recruiting (apart from CKD and diabetes). **Response 3. We have better described how we recruited our patient partners in the methods section on page 6.** Comment 4 "Our patient partners assisted with the study design,..." What do you mean about assisted? Is that different by example of "be involved"? Maybe well develop the roles and responsibilities of patient partners in each part of that involvement. **Response 4. "Involved" is a better descriptor and we have changed this word throughout the manuscript.** Comment 5. Data collection: Just to know: were any of the patient partners was one of your patients as clinicians? If yes, maybe describe the relation change since the beginning until the end of the research project. It would be interesting to know. **Response 5. Neither clinician had therapeutic relationship with patient partner. We have stated this on page 6 of the methods.** Comment 6. Reflecting on patient engagement: "We also noted a disconnect between the timelines of patients and investigators. From an investigator perspective, protocols need to written, grants obtained, and ethics submitted, before research can be conducted. Patients however, want research to be completed quickly and lead to better patient care as soon as possible." It's something I see very often in my job. Patients want it be usable (the results of study) right away for other patients. Your article is very interesting. I like to know more and more about the How to. All research teams want to begin a POR ask always about it. How can involve patients in my research project? So, I think if you add more details about the How to, it will be very good for readers. **Response 6. Thank you. We have done our best to not only highlight the care challenges and solutions of patients with CKD and diabetes in this manuscript (i.e. the aim of this project) but have also included some "how tos" on conducting patient-oriented research.**
Reviewer 3	Meaghan Lunney
Institution	University of Calgary Cumming School of Medicine, Community Health Sciences
General comments (author response in bold)	Comment 1. Author list: I suggest adding the role (patient partner) to Jim O'Donnell's affiliation. **Response 1. We have added Patient Partner to Jim's affiliation** Comment 2. I suggest adding the word "both" after "Diabetes care can benefit people with" to clarify (Lay summary [pg 2 line 7], Abstract [pg 3 line 7]).

Response 2. We have added the word both in the Lay Summary and Abstract.

Comment 3. Methods: It may help to clarify the aim of involving patient partners in your study. For example, was it 1) to study the process of patient engagement or 2) to ensure the study was patient-oriented? Your results exclusively report on findings of the focus groups/interviews, yet much of your interpretation discusses your experiences of patient engagement. If the goal of patient engagement in this study was to ensure your study followed a patient-centred approach, you may want to consider restructuring your interpretation to be less about patient involvement in research and more about the primary results of your study. You may want to refer to Hamilton's framework (Framework for advancing the reporting of patient engagement in rheumatology research projects. Curr Rheumatol Rep. 2017 July;19(7):38). If your objective was to study patient involvement in research, please consider revising your results to report on your findings of this process.

Response 3. Thank you for this reference. We have now used it to better describe our patient engagement processes throughout this study.
The main aim of this study was to understand the care challenges and solutions of patients with diabetes and kidney disease. As such, we tried to make this the focus of our results and discussion. We involved patient partners in this work to ensure that our study remained patient-oriented (i.e. centered around patients) (stated now on page 6 of the methods). We followed journal guidelines to report our methods of engagement, and the challenges and benefits of the engagement experience.
We recognize that this was a lot to explore in the current manuscript. We have tried to highlight the primary results of this study as best as possible (i.e. without adding any more to the word count), and have reduced our discussion of patient engagement to try to not take away from our main results.

Comment 4. Recruitment: Patients that were too ill to participate were excluded. Was this defined by the patient, healthcare providers, or researchers?

Response 4. Participant illness was defined by the patient. However, rather than an exclusion criterion, this should have been described as a reason for not participating in our study. We have now highlighted this in our results section on page 7.

Comment 5. Findings: Was the interview guide structured to identify care challenges and possible solutions? If so, I suggest you rephrase line 15 on page 9 “There were two broad themes that emerged from the data” to something such as “Patients were asked to comment on two topics”.

Response 5. The interview guide was designed to understand the impact of diabetes and CKD on participants’ lives (not reported in the current manuscript), their care challenges and possible solutions. We have rephrased line 15 as per your suggestion.

Comment 6. Table 1: For your continuous variables, please consider adding a standard deviation or range to describe the variability.

Response 6. We have now added the range for continuous variables in Table 1.

Comment 7. Figure 1: The figure appears to represent the patient experience of transitioning from not having diabetes, to having diabetes, and later developing CKD. I am unclear how this fits the themes identified in this paper. For example, the topics explored were challenges people with both CKD and diabetes experience with their care, and potential solutions to address these challenges. I suggest a visual representation that summarizes these challenges with or without the component of solutions. Some of the images used in the current figure to represent these challenges are not clear without referring to the text.

	Response 7. We have removed this Figure from the manuscript.