

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Perceptions of family medicine among long-term patients of a family medicine clinic in Japan: a mixed-methods study
AUTHORS	Sato, Kotaro; Michinobu, Ryoko; Kusaba, tesshu

VERSION 1 – REVIEW

REVIEWER	Felicity Goodyear-Smith The University of Auckland, General Practice & Primary Health care
REVIEW RETURNED	22-Sep-2023

GENERAL COMMENTS	<p>I have previously reviewed the protocol for this paper, subsequently published in BMJ Open. In general the authors have adhered well to the methods outlined in their protocol. I have a few minor comments.</p> <p>While the aim of the study is implicitly explained, it would be good to have an explicit aim and objectives before the methods section.</p> <p>In the protocol they identified that there were 209 patients attending the clinic over 10 years as potential participants. However in the study this had dropped to 184, of whom 144 (78%) were recruited. What was the cause of the reduced number – ha some deceased or moved away? Or were these the ones suffering from dementia and 'old age'?</p> <p>With regard to the qualitative component, the protocol specified semi-structured interviews sampling from people in three different groups (classified according to their perception of family medicine - whether or not they knew that MFC provided family medicine and how strongly they perceived family medicine for its comprehensiveness or longitudinally). In the study it appears that eight participants were interviewed, but it is unclear whether they belonged to different 'groups' and how they were recruited. The interviews were thematically analysed. Only two themes emerged. What determined the number of interviews? Did they continue until data saturation occurred? Were there any differences in response between people in the three different groups?</p> <p>In general the paper is well written but there are a few areas where the clarity could be improved.</p> <ul style="list-style-type: none"> • Title: 'Patients' perceptions of family medicine: Mixed methods study on patients attending a family medicine clinic for a long time in Japan' – for a long time is somewhat colloquial. This might read better as 'Patients' perceptions of family medicine: Mixed methods study on long-term patients of a family medicine clinic in Japan'. • 'It is difficult to generalize in a single step, as the medical environment in Muroran may have a significant impact on patients' perceptions of family medicine.' This needs to be re-written. What is
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	<p>the single step? Do they mean that factors such as other medical services in the region may have influenced the results?</p> <ul style="list-style-type: none"> • 'We show the already published protocol'. Could be rewritten as 'please refer to our published protocol'. • References: Inconsistent use of italics for journal names
REVIEWER	<p>Miharu Nakanishi Koeki Zaidan Hojin Tokyo-to Igaku Sogo Kenkyujo</p>
REVIEW RETURNED	<p>08-Oct-2023</p>
GENERAL COMMENTS	<p>The present study asked patients who have attended a clinic named "family clinic" about their impression of family medicine. Major challenges may include a lack of implications for healthcare in Japan as well as internationally, absence of main hypothesis, undefined "family medicine", and unclear definition of sample patient group.</p> <p>Title "For a long time" may not be a common term in English.</p> <p>Abstract Page 3 line 8: "long-term perceptions" may not be appropriate as this study was based on a cross-sectional observation.</p> <p>Page 3 lines 14-17: the period of survey implementation should be described in Abstract as well as in main text.</p> <p>Page 3 lines 27-28: a total number of participants should be described in Abstract. It may appear to be strange that 9% of patients who have attended a family medicine clinic reported not having attended an FMC. Does it mean that 9% of sampled patients stopped use of clinic?</p> <p>Page 3 lines 42-44: "uniquely characterized" may not be supported by the Results section, as there was no control/comparison with other groups.</p> <p>Introduction Page 4 lines 25-32: do Japanese family physicians play a role in primary care similar with general practitioners? What does the authorization by the Japanese Medical Special Board mean in Japanese healthcare system? Do they perform a gatekeeping role?</p> <p>Page 4 lines 35-38: why do Japanese people need to further understand the speciality of family medicine?</p> <p>Page 4 lines 44-49: perception of patients who have attended a family medicine clinic may reflect what the clinic has provided to the patients rather than the general (expected) role of family medicine.</p> <p>Page 4 lines 55-56: rationales of definition of long-term patients (10 years or longer) should be mentioned. Do "unique characteristics" refer to characteristics of family medicine in Japan compared with other countries, or family medicine in Hokkaido's Muroran City compared with overall Japan?</p> <p>Methods Page 5 lines 26-31: did the authorization of family medicine in 2018 affect (alter) the practice of family medicine in the clinic? It may be relevant to the validity of patients' perception that might have been</p>

	<p>assessed in 2019, soon after the potential changes.</p> <p>Page 5 lines 31-38: are there three departments (internal medicine, pediatrics, and family medicine) in the clinic? Does each of four physicians address to patients regardless of the department? it may be difficult for international readers to understand the function of "department of family medicine" in the clinic.</p> <p>Page 5 lines 37-42: definition of "regularly (attended)" should be explained.</p> <p>Page 5 lines 41-44: who did assess the patient's cognitive capacity to respond, and on what basis (diagnosis of dementia or cognitive test)?</p> <p>Page 6 lines 14: information on JPCAT should be provided, e.g. number of items, response options, range and meaning of the total score, and validity and reliability of Japanese version.</p> <p>Page 6 lines 26-29: the questionnaire for patients (Appendix 1) includes two sections, 10) and 11) that were almost same with each other. Section 11) might have been used in this study, as it is single response question corresponding to Table 3.</p> <p>Page 6 lines 35-42: three groups "A, B, and C" may not match with two groups in Table 2 based on "whether or not they knew that MFC provided family medicine".</p> <p>I could not find any information on ethics approval either in 2.3 Procedures or Acknowledgments sections. It should be mentioned who explained the voluntary nature of the survey to patients (because physicians recruited patients at clinics, page 7 lines 51-54), and that decline to participate will not affect the treatment they receive. Who conducted semi-structured interviews? How were eight patients selected from 131 respondents of questionnaires?</p> <p>Results</p> <p>Page 8 lines 6-8: 184 gave consent to participate but did not respond to the questionnaire? Or were there potential 184 patients and 144 gave consent to participate?</p> <p>Page 8 lines 12-15: a summary of differences between 131 and 13 patients should be described.</p> <p>Page 8 lines 18-23: how many minutes did the interview take for each patient? How many original codes were extracted from thematic analysis?</p> <p>Page 9 line 41 - page 10 line 11: I wonder if three quoted patients attended the same physician.</p> <p>Page 10 lines 26 - 42: I also wonder if the quoted patients have received medical care at home.</p> <p>Discussion</p> <p>As mentioned above, it is unclear what implications will the findings of this study have for healthcare in Japan as well as internationally.</p> <p>Page 11 lines 29-35: "JPCAT reflects patient experience" - what does it mean? Does JPCAT assess level of satisfaction with family</p>
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	<p>medicine, or amount of experience with family medicine?</p> <p>Page 12 lines 25: I am not sure whether the patients who have attended the family medicine clinic could also go to other medical institutions, and compare them with the clinic.</p> <p>Page 12 lines 43-57: as commented above, it is difficult to clarify uniqueness of the characteristics as there was no control/comparison with other groups.</p> <p>Page 13 lines 26-29: since physicians who treated the patients invited them to participate, a response bias may have occurred.</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Prof. Felicity Goodyear-Smith, The University of Auckland Comments to the Author:

I have previously reviewed the protocol for this paper, subsequently published in BMJ Open. In general the authors have adhered well to the methods outlined in their protocol. I have a few minor comments.

While the aim of the study is implicitly explained, it would be good to have an explicit aim and objectives before the methods section.

→I explicitly wrote this study's aims before the methods section.

Therefore, we treated perceptions of family physicians and family medicine as almost synonymous from the patients' viewpoint in this study.

The aims of this study were as follows :

- To examine the perceptions of family medicine in patients attending a family medicine clinic for over 10 years
- To explore the unique characteristics of family medicine in Japan, which was developed in the local community in northern Japan.

Methods

2.1 Study setting and participants

The Motowanishi Family Clinic (MFC) [9] is located in Hokkaido's Muroran City, opened in 1996 before family medicine was authorized in 2018, and is one of the oldest family medicine

In the protocol they identified that there were 209 patients attending the clinic over 10 years as potential participants. However in the study this had dropped to 184, of whom 144 (78%) were recruited. What was the cause of the reduced number – have some deceased or moved away? Or were these the ones suffering from dementia and 'old age'?

→I created Figure 1: Flow diagram and explained the details.

With regard to the qualitative component, the protocol specified semi-structured interviews sampling from people in three different groups (classified according to their perception of family medicine - whether or not they knew that MFC provided family medicine and how strongly they perceived family medicine for its comprehensiveness or longitudinally). In the study it appears that eight participants were interviewed, but it is unclear whether they belonged to different 'groups' and how they were recruited. The interviews were thematically analysed. Only two themes emerged. What determined the number of interviews? Did they continue until data saturation occurred? Were there any differences in response between people in the three different groups?

I added the process of the qualitative study in detail.

2.3.2 Phase II

Using the results from regarding patients' perceptions of specialty in family medicine, we conducted maximum variation sampling [14]. Specifically, the participants were divided into groups A, B, and C according to whether or not they knew that MFC provided family medicine. If they did, we assessed whether they more strongly perceived family medicine for its comprehensiveness or longitudinality. First, for comprehensiveness: Group A, interviewees were selected according to the number of organ type in ICPC. If comprehensiveness is recognized as a characteristic of family medicine, it is highly likely that patients are attending MFC for a wide variety of organ health problems. Therefore, to ensure diversity, we selected two participants with a low number of organ type, one with an average number of organ type, and one with a high number of organ type. For longitudinality: Group B, participants visiting the same physicians each time was closely related to longitudinality regarding the doctor-patient relationship. Therefore, we selected one participant who attended the same physician monthly, one who saw the same physician annually, and two participants who saw a different physician every time. One or two participants from each group with smaller study IDs were included in phase 2 after the researcher contacted them and obtained their consent to be interviewed. Semi-structured interviews were conducted by two researchers (K.S. and R.M.) with nine participants (Table 1) according to the interview guide (Appendix 4) from February 2020 to March 2020. There was a flow diagram (Figure 1). All interviews were recorded and transcribed.

In general the paper is well written but there are a few areas where the clarity could be improved.

- Title: 'Patients' perceptions of family medicine: Mixed methods study on patients attending a family medicine clinic for a long time in Japan' – for a long time is somewhat colloquial. This might read better as 'Patients' perceptions of family medicine: Mixed methods study on long-term patients of a family medicine clinic in Japan.'

The title was changed after the Editor-in-Chief made a similar point.

- 'It is difficult to generalize in a single step, as the medical environment in Muroran may have a significant impact on patients' perceptions of family medicine.' This needs to be re-written. What is the single step? Do they mean

that factors such as other medical services in the region may have influenced the results?

I meant that factors such as other medical services in the region may have influenced the results. The phrase "single step" was removed.

5. Limitations

It is possible that many of the patients who agreed to cooperate in the study after receiving explanations from their doctors but did not respond to the questionnaire were not aware that they were in a family medicine clinic. However, the questionnaire collection rate was 78%, which was considered representative of the target population. Additionally, the multiple-choice format of the questionnaire was considered unlikely to cause social desirability bias.

It was assumed that most participants had a satisfactory clinic visit experience because they visited the clinic for >10 years. Therefore, negative perceptions of family medicine might not have emerged.

We addressed this issue in Phase II through semi-structured

interviews posing questions about future shortcomings and expectations. This study's results showed that patients' perceptions of family medicine were also influenced by the medical situation surrounding the MFC in Muroran City, indicating that it may be difficult to generalize the results.

- 'We show the already published protocol'. Could be rewritten as 'please refer to our published protocol'.

I revised the manuscript.

2.2 Research design

A mixed-methods explanatory sequential design was used from the pragmatism paradigm perspective of adopting the best way to achieve this study's objectives [10]. In Phase I, a quantitative method based on a questionnaire was used to obtain basic information about the participants and their perceptions of family medicine. In Phase II, a qualitative method based on interviews was used to determine the reasons for their responses from Phase I. The results of Phase I and Phase II were subsequently combined and interpreted. The institutional review board of the Japan Primary Care Association approved this research (2019-003). In both phases, we explained in advance and assured the participants that their cooperation or non-cooperation in the study would

not affect, in any way, the medical care they receive and not suffer any disadvantages. Please refer to our published protocol [11].

- References: Inconsistent use of italics for journal names I revised the manuscript.

Reviewer: 2

Dr. Miharuru Nakanishi, Koeki Zaidan Hojin Tokyo-to Igaku Sogo Kenkyujo Comments to the Author: The present study asked patients who have attended a clinic named "family clinic" about their impression of family medicine.

Major challenges may include a lack of implications for healthcare in Japan as well as internationally, absence of main hypothesis, undefined "family medicine", and unclear definition of sample patient group.

The aging population and increasing cost of health care is an international challenge, and family physicians specializing in primary care are an effective means of addressing this challenge, as described in Refs. 2 and 3.

Although family medicine has been defined internationally (Ref. 6) and domestically (Refs. 4 and 5), we do not know how patients and users perceive family medicine, which we wanted to clarify this in our study. By clarifying this issue in the field of family medicine in Japan, we may be able to provide a clue to promote family medicine in a country, where family medicine needs further development.

The definition of sample patient group is as follows:

All patients who attended the MFC regularly since April 2009 and those who continued to attend the clinic regularly as of April 2019 were included in the study. Patients who could not complete the questionnaire or be interviewed due to dementia or old age were excluded.

2.1 Study setting and participants

The Motowanishi Family Clinic (MFC) [9] is located in Hokkaido's Muroran City, opened in 1996 before family medicine was authorized in 2018, and is one of the oldest

family medicine clinics in Japan. It is also an educational clinic that trains family physicians. While MFC mainly advocates internal medicine and pediatrics, family medicine has also been listed in parentheses on its signage. The clinic operates a group practice with four physicians providing both outpatient and home visits. All patients who had been attending the MFC every 1–2 months since April 2009 and those who continued to attend the clinic regularly as of April 2019 were included in the study. Patients attending the clinic for >10 years and receiving continuous treatment are defined as long-term patients. Patients who could not complete the questionnaire or be interviewed due to dementia or old age were excluded by MFC physicians. (Figure 1).

Title

"For a long time" may not be a common term in English. I revised the title.

Abstract

Page 3 line 8: "long-term perceptions" may not be appropriate as this study was based on a cross-sectional observation.

I removed "long-term".

Abstract

Objectives: To examine the long-term perceptions of family medicine in patients attending a family medicine clinic for over 10 years in Japan and explores the unique characteristics of family medicine, which was developed in the local community in northern Japan.

Page 3 lines 14-17: the period of survey implementation should be described in Abstract as well as in main text.

I revised the abstract and manuscript.

Abstract

Objectives: To examine the perceptions of family medicine in patients attending a family medicine clinic for over 10 years in Japan and explores the unique characteristics of family medicine, which was developed in the local community in northern Japan.

Design: Explanatory sequential mixed-method design, comprising a survey by questionnaires and semi-structured interviews.

Setting: One of the oldest family medicine clinic as primary care in Japan, family medicine is developing in the country. We surveyed and interviewed participants from November 2019 to March 2020.

2.3 Procedures

2.3.1 Phase I

We prepared physicians to explain the study outline before Phase I. Physicians explained to participants and, if they assented, they responded to the questionnaire by mail from November 2019 to December 2019. Data from the questionnaire were entered by one researcher (K.S) and checked by the others (R.M).

2.3.2 Phase II

Using the results from regarding patients' perceptions of specialty in family medicine, we conducted maximum variation sampling [14]. Specifically, the participants were divided into groups A, B, and C according to whether or not they knew that MFC provided family medicine. If they did, we assessed whether they more strongly perceived family medicine for its comprehensiveness or longitudinality. First, for comprehensiveness: Group A, interviewees were selected according to the number of organ type in ICPC. If comprehensiveness is recognized as a characteristic of family medicine, it is highly likely that patients are attending MFC for a wide variety of organ health problems. Therefore, to ensure diversity, we selected two participants with a low number of organ type, one with an average number of organ type, and one with a high number of organ type. For longitudinality: Group B, participants visiting the same physicians each time was closely related to longitudinality regarding the doctor-patient relationship. Therefore, we selected one participant who attended the same physician monthly, one who saw the same physician annually, and two participants who saw a different physician every time. One or two participants from each group with smaller study IDs were included in phase 2 after the researcher contacted them and obtained their consent to be interviewed. Semi-structured interviews were conducted by two researchers (K.S. and R.M.) with nine participants (Table 1) according to the interview guide (Appendix 4) from February 2020 to March 2020. There was a flow diagram (Figure 1). All interviews were recorded and transcribed.

Page 3 lines 27-28: a total number of participants should be described in Abstract. It may appear to be strange that 9% of patients who have attended a family medicine clinic reported not having attended an FMC. Does it mean that 9% of sampled patients stopped use of clinic?

9% of the participants have been attending the family medicine clinic for more than 10 years, however, they are unaware that the clinic provides family medicine. Since family medicine departments are not allowed to advocate, the Motowanishi Family Clinic advocates internal medicine and pediatrics (family medicine). I included this in the study setting.

Abstract

Participants: 144 patients who attended a family medicine clinic since April 2009 completed questionnaires. Semi-structured interviews with nine participants were conducted.

Page 3 lines 42-44: "uniquely characterized" may not be supported by the Results section, as there was no control/comparison with other groups.

The concept of "medical care at home." in this study's qualitative results is unique from the patient's perception perspective, compared to that of the physician's definition of the specialty of family medicine. Details are provided in the discussion (P11, Lines 20-26 and P12 Lines 1-11).

Introduction

Page 4 lines 25-32: do Japanese family physicians play a role in primary care similar with general practitioners? What does the authorization by the Japanese Medical Special Board mean in Japanese healthcare system? Do they perform a gatekeeping role?

Japanese family physicians are specially trained specialists responsible for primary care. General practitioners (Kaigyo-i) are primary care physicians, but their quality is not guaranteed. However, there are insufficient family physicians to provide primary care throughout Japan.

The official inclusion of the department of family medicine in the Japanese Medical Special Board is the first step toward the establishment of an advocacy department. Currently in Japan, the trained specialty and specialty of advocacy does not coincide. For example, a physician who has been practicing as an anesthesiologist for 20 years can, when opening a clinic, advocate internal medicine, pediatrics, and so forth.

The Japanese healthcare is a universal health insurance system, and family physicians do not play a gatekeeping role as in the U.K. However, when individuals choose a medical institution on their own, the specialty of the physician working there matches the specialty of advocacy at the clinic, is an important guideline for those seeking medical care.

Page 4 lines 35-38: why do Japanese people need to further understand the speciality of family medicine?

Japan's aging population will further increase therefore, there is a need for family physicians as primary care specialists.

Here is the same reply as previously mentioned :

The aging population and increasing cost of health care is an international challenge, and family physicians specializing in primary care are an effective means of addressing this challenge, as described in Refs. 2 and 3.

Page 4 lines 44-49: perception of patients who have attended a family medicine clinic may reflect what the clinic has provided to the patients rather than the general (expected) role of family medicine. I agree. The novelty of this study lies here, in that it is not a general understanding of family medicine, but a search for the perception of family medicine based on the actual experience of each patient who attended a family medicine clinic for more than 10 years to determine that perception. However, as noted in this study's limitations, caution needs to be applied in generalizing the results.

Page 4 lines 55-56: rationales of definition of long-term patients (10 years or longer) should be mentioned.

Long-term patient is a generic term for outpatient treatment over many years rather than a fixed period of time. Accordingly, patients who have been attending the clinic for more than 10 years and receiving continuous treatment are defined as long-term patients.

I added the rationale for the definition of long-term patient.

Methods

2.1 Study setting and participants

The Motowanishi Family Clinic (MFC) [9] is located in Hokkaido's Muroran City, opened in 1996 before family medicine was authorized in 2018, and is one of the oldest family medicine clinics in Japan. It is also an educational clinic that trains family physicians. While MFC mainly advocates internal medicine and pediatrics, family medicine has also been listed in parentheses on its signage. The clinic operates a group practice with four physicians providing both outpatient and home visits. All patients who had been attending the MFC every 1–2 months since April 2009 and those who continued to attend the clinic regularly as of April 2019 were included in the study. Patients attending the clinic for >10 years and receiving continuous treatment are defined as long-term patients.

Do "unique characteristics" refer to characteristics of family medicine in Japan compared with other countries, or family medicine in Hokkaido's Muroran City compared with overall Japan?

Neither the foreign nor Japanese definition differs greatly. However, the intention is that the characteristics of family medicine as perceived by patients are unique compared to that of the specialty of family medicine defined by physicians.

Methods

Page 5 lines 26-31: did the authorization of family medicine in 2018 affect (alter) the practice of family medicine in the clinic? It may be relevant to the validity of

patients' perception that might have been assessed in 2019, soon after the potential changes.

Motowanishi Family Clinic has been practicing and teaching family medicine since its inception in 1996, with the Department of Family Medicine in brackets, therefore, there is no impact on the practice due to the 2018 authorization.

Page 5 lines 31-38: are there three departments (internal medicine, pediatrics, and family medicine) in the clinic? Does each of four physicians address to patients regardless of the department? it may be difficult for international readers to understand the function of "department of family medicine" in the clinic.

Although we offer "internal medicine and pediatrics (family medicine)" as our specialty, all physicians will deal with a wide range of diseases, including internal medicine and pediatrics. One of the important specialties of family medicine is to see a wide range of common diseases. Family medicine and general practice are better known overseas and perhaps not as difficult to understand.

2.1 Study setting and participants

The Motowanishi Family Clinic (MFC) [9] is located in Hokkaido's Muroran City, opened in 1996 before family medicine was authorized in 2018, and is one of the oldest family medicine clinics in Japan. It is also an educational clinic that trains family physicians. While MFC mainly advocates internal medicine and pediatrics, the department of family medicine has also been listed in parentheses on its signage.

Page 5 lines 37-42: definition of "regularly (attended)" should be explained. I revised the manuscript: every 1–2 months.

2.1 Study setting and participants

The Motowanishi Family Clinic (MFC) [9] is located in Hokkaido's Muroran City, opened in 1996 before family medicine was authorized in 2018, and is one of the oldest family medicine clinics in Japan. It is also an educational clinic that trains family physicians. While MFC mainly advocates internal medicine and pediatrics, family medicine has also been listed in parentheses on its signage. The clinic operates a group

practice with four physicians providing both outpatient and home visits. All patients who had been attending the MFC every 1–2 months since April 2009 and those who continued to attend the clinic regularly as of April 2019 were included in the study.

Page 5 lines 41-44: who did assess the patient's cognitive capacity to respond, and on what basis (diagnosis of dementia or cognitive test)?

When explaining the study, the physician determined cognitive decline to determine inclusion or exclusion from the study.

2.1 Study setting and participants

The Motowanishi Family Clinic (MFC) [9] is located in Hokkaido's Muroran City, opened in 1996 before family medicine was authorized in 2018, and is one of the oldest family medicine clinics in Japan. It is also an educational clinic that trains family physicians. While MFC mainly advocates internal medicine and pediatrics, family medicine has also been listed in parentheses on its signage. The clinic operates a group practice with four physicians providing both outpatient and home visits. All patients who had been attending the MFC every 1–2 months since April 2009 and those who continued to attend the clinic regularly as of April 2019 were included in the study. Patients attending the clinic for >10 years and receiving continuous treatment are defined as long-term patients. Patients who could not complete the questionnaire or be interviewed due to dementia or old age were excluded by MFC physicians. (Figure 1).

Page 6 lines 14: information on JPCAT should be provided, e.g. number of items, response options, range and meaning of the total score, and validity and reliability of Japanese version. Please see reference 12.

Page 6 lines 26-29: the questionnaire for patients (Appendix 1) includes two sections, 10) and 11) that were almost same with each other. Section 11) might have been used in this study, as it is single response question corresponding to Table 3.

Your point is correct. I added the explanation of Table 3.

Page 6 lines 35-42: three groups "A, B, and C" may not match with two groups in Table 2 based on "whether or not they knew that MFC provided family medicine".

I added Figure 1: Flow diagram. Please refer to it.

I could not find any information on ethics approval either in 2.3 Procedures or Acknowledgments sections. It should be mentioned who explained the voluntary nature of the survey to patients (because physicians recruited patients at clinics, page 7 lines 51-54), and that decline to participate will not affect the treatment they receive. Who conducted semi-structured interviews? How were eight patients selected from 131 respondents of questionnaires?

Ethics approval was noted in 2.2 Research design. I added the following:

"In both phases, we explained in advance and assured the participants that their cooperation or non-cooperation in the study would not affect, in any way, the medical care they receive and not suffer any disadvantages." The researchers conducting the semi-structured interviews were noted.

Please see Figure 1: Flow diagram for the selection of eight participants.

2.2 Research design

A mixed-methods explanatory sequential design was used from the pragmatism paradigm perspective of adopting the best way to achieve this study's objectives [10]. In Phase I, a quantitative method based on a questionnaire was used to obtain basic information about the participants and their perceptions of family medicine. In Phase II, a qualitative method based on interviews was used to determine the reasons for their responses from Phase I. The results of Phase I and Phase II were subsequently combined and interpreted. The institutional review board of the Japan Primary Care Association approved this research (2019-003). In both phases, we explained in advance and assured the participants that their cooperation or non-cooperation in the study would not affect, in any way, the medical care they receive and not suffer any disadvantages. Please refer to our published protocol [11].

2.3.2 Phase II

Semi-structured interviews were conducted by two researchers (K.S. and R.M.) with nine participants (Table 1) according to the interview guide (Appendix 4) from February 2020 to March 2020. There was a flow diagram (Figure 1). All interviews were recorded and transcribed.

Results

Page 8 lines 6-8: 184 gave consent to participate but did not respond to the questionnaire? Or were there potential 184 patients and 144 gave consent to participate?

A total of 184 participants provided consent to participate however, 144 responded to the questionnaire by mail. Please see Figure 1: Flow diagram.

Page 8 lines 12-15: a summary of differences between 131 and 13 patients should be described.

I described a summary of Table 2. Revision

3. Results

The total number of participants in Phase I was 184, and the number of respondents 144 (response rate: 78%). Of all respondents, 131 (91%) were aware that the specialty of MFC was family medicine, 10 (7%) were aware of internal medicine and two (1%) were not aware of any specialty. A comparison of basic information between the groups who were and not aware of attending a family medicine clinic is shown in Table 2.

Comparison of these two groups showed no significant differences in several basic information such as age and gender, and in items related to specific medical treatment. However, the group that was aware of MFC as a family medicine clinic had statistically significantly higher scores in the total JPCAT score (16), continuity, comprehensiveness, and community orientation domains. Furthermore, this group also tended to have a higher percentage of patients: consultations with the same physician.

Page 8 lines 18-23: how many minutes did the interview take for each patient? How many original codes were extracted from thematic analysis?

The duration of interviews per patient were as follows: A: 71 minutes, B: 51 minutes, C: 64 minutes, D: 86 minutes, E: 47 minutes, F: 56 minutes, G: 62 minutes, H: 51 minutes and I: 58 minutes.

Eight codes were extracted from thematic analysis. Revision

Seeing the whole person and referring suitably

This theme encompassed five codes: comprehensiveness, coordination, responsiveness, longitudinal care, and understanding the whole person. Participants perceived family medicine as medical care

that first looks at the whole picture, consults with the patient on all health issues, and, in some cases, refers them to a specialist doctor.

Medical care at home

This theme encompassed three codes: medical care coming home, home care, and continual care. Doctors and nurses would visit the patients at their homes to provide medical care if they were unable to visit the clinic or bedridden.

Page 9 line 41 - page 10 line 11: I wonder if three quoted patients attended the same physician. At least H was a participant who did not consult with the same doctor each time (see Table 1). All three participants did not attend the same physician.

Page 10 lines 26 - 42: I also wonder if the quoted patients have received medical care at home. All participants were outpatients and none of them received home medical care.

Discussion

As mentioned above, it is unclear what implications will the findings of this study

have for healthcare in Japan as well as internationally. In my first response, I explained this study's significance.

Page 11 lines 29-35: "JPCAT reflects patient experience" - what does it mean? Does JPCAT assess level of satisfaction with family medicine, or amount of experience with family medicine? Unlike patient satisfaction, the JPCAT is an objective measure of primary care quality in terms of patient-centeredness by posing questions to patients about specific events related to their care (see Reference 12).

Page 12 lines 25: I am not sure whether the patients who have attended the family medicine clinic could also go to other medical institutions, and compare them with the clinic. As you noted, we have revised the description because it is uncertain whether or not the participants were comparing the clinic to other medical facilities.

Revision

Patients' perceptions of family medicine in Japan

Previous studies on perceptions of family medicine in Japan did not focus on the patients, but on the general population [8]. They mainly focused on findings that were not based on actual experiences of receiving medical care but on ideals [7] or impressions derived from the term "family medicine" or "general practice." This study was the first to reveal the perceptions of patients who had attended a family physician as their usual source of care for >10 years. The result showed that, first, the majority of the patients were aware of family medicine. No differences were found in patient characteristics or medical treatments in terms of awareness of family medicine.

Compared to the JPCAT, which is a patient-reported scale that reflects patient experience [12,17], the JPCAT total score was predominantly higher in the group aware of family medicine, although the proportion of those attending for >15 years did not differ. The high-quality patient experience of primary care based on the experience of receiving care may have established the new name of family medicine instead of internal medicine.

Page 12 lines 43-57: as commented above, it is difficult to clarify uniqueness of the characteristics as there was no control/comparison with other groups.

Neither the foreign nor Japanese definition differs greatly, but the intention is that the characteristics of family medicine as perceived by patients are unique compared to the specialty of family medicine as defined by the physicians.

Additionally, home care is not defined as a specialty of family physicians, there is an argument that it is not the job of family physicians (Refs. 20,21). In this sense, the theme of this issue of "medical care at home" is unique.

Page 13 lines 26-29: since physicians who treated the patients invited them to participate, a response bias may have occurred.

I added the limitations to the manuscript.

Please refer to Appendix 4 for a discussion on the limitations of interviews and how they were managed.

Revision

5.Limitations

It is possible that many of the patients who agreed to cooperate in the study after receiving explanations from their doctors but did not respond to the questionnaire were not aware that they were in a family medicine clinic. However, the questionnaire collection rate was 78%, which was considered representative of the target population. Additionally, the multiple-choice format of the questionnaire was considered unlikely to cause social desirability bias.

It was assumed that most participants had a satisfactory clinic visit experience because they visited the clinic for >10 years.