

Supplemental Material

Interview Guide: Patients with Diabetes and Osteoarthritis

Thank you for agreeing to speak with me today. I'm going to begin the interview by asking you a few questions in order to get to know you and to learn about your experience with having diabetes and osteoarthritis. We are going to be doing a study that tests an intervention to improve treatment of joint pain in people with diabetes but before we start we really want to hear from people like yourself who are living with both of these conditions. These questions serve as a guide only. We encourage you to talk about any aspect of the topic you wish. There are no right or wrong answers to these questions. Questions will start very broadly and I'll ask some more specific questions towards the very end of the interview.

We will be audio recording the interview, in order to capture all the details of our conversation. This is a purely voluntary activity, so remember that you may end the interview at any time. If you need to take a break, please let me know and we can do so. Also, if you feel uncomfortable with any question, tell me and we can skip it. No personal information about you will be shared with anyone outside of the study team. No identifying information will be shared in any reports or publications. While we might use direct quotes in such reports, they will only be attributed more generally to someone who is a "patient", etc. All the information provided by you will be kept strictly confidential and we hope you will feel able to speak freely as we genuinely want to hear your perspective.

If a question does not make sense, let me know so I can ask it more clearly. Take as much time as you like to answer the questions.

Do you have any questions before we begin?

(and if not, start recording)...

1. Our study is focused on people living with both diabetes and joint pain due to arthritis. I'm going to ask you about each of these conditions to learn more about how they impact your life. So first of all, tell me about your diabetes.

Probes:

- How long have you had diabetes?
- How are you currently managing your diabetes – what is your current (treatment) approach? Has this changed over time?

2. So now, tell me about your joint pain. What has that experience been like?

Probes:

- How long have you had joint pain?
 - Did a physician or other health care provider diagnose you with arthritis? If so, tell me about that experience.
 - When was that?
 - What did they tell you?
 - Have you discussed your joint pain or arthritis diagnosis with the health care providers who treat your diabetes? What did *they* tell you?
 - How active or troublesome do you feel your arthritis is right now?
3. What kinds of treatments have you tried to manage your joint pain?
- Probes:
- Have you ever been seen by a physiotherapist or occupational therapist? If so, what was that experience like?
 - Who suggested you see them (physiotherapist or occupational therapist)?
 - Was this early on in your symptoms, or had they been going on for a while?
 - Have you used any other treatments or therapies for your joint pain? Who prescribed or suggested it?
4. Our study is focused on people living with *both* diabetes and arthritis. So can you tell me what it is like to live with *both* diabetes *and* pain in your joints from arthritis?
- Probes:
- How does it affect your everyday life? Your mood, being able to complete your daily tasks, keep up with friends and family, participate in activities that you enjoy?
 - What kinds of challenges do you face living with both conditions?
 - How does the one condition affect the other, in your view?
5. We're interested in your experiences participating in physical activity (e.g. activities when you are moving around, like walking). Tell me about what kinds of physical activity you typically do. What does a typical day or week look like?
- Probes:
- What activities do you like do? Have you been able to continuing doing those?
 - Tell me about the activities you find easier and also those you find more challenging to do?
 - What seem to be the primary things that limit your ability to exercise or be active?
(Probes: are these symptoms related to having joint pain, or to diabetes?)

6. How important is physical activity to you? How important is it for managing your diabetes? Your arthritis?

Probes:

- How satisfied are you with your current level of physical activity? What would you change if you could?
- There's a lot of talk of physical activity these days. What role do you feel physical activity plays in the lives of people with diabetes? What about for people with arthritis?

7. Has a health care provider ever discussed physical activity with you? If so, tell me about that experience.

Probes:

- Who has discussed it with you?
- What did you find helpful?
- What did you find unhelpful?
- What would you like to know about physical activity?

8. What kind of supports, resources or tools do you think would help in keeping physically active OR allowing you to become more physically active?

Probes:

- If you had a new resource, what would that look like?
- What do you think health care providers could do to help you be more physically active or sustain your level of physical activity? Can you give me an example?
- What kind of information on physical activity would be helpful to you?
- How would you like to receive such information? From whom? In what formats?
- Have you used technology, such as wearable devices or apps, to help you be active in the past? What was your experience like?

9. Do you have anything else you wish to say related to your health, diabetes, joint pain or physical activity? Is there anything else you'd like to raise that we didn't talk about today?

10. I would like to finish by asking about some demographic information and some details about your diabetes and arthritis:

What is your...

| | |
|--------|---|
| Age | 40-49, 50-59, 60-69, 70+ |
| Gender | Male, Female, Other, Prefer not to answer |

| Location of residence | Urban, suburban, rural | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Diabetes duration | 0-4 years, 5-9 years, 10-14 years, 15-20 years, 20-24 years, 25+ years | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diabetes treatment | No medications Oral medications Insulin (+/- oral meds) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Osteoarthritis duration | 0-4 years, 5-9 years, 10-14 years, 15-20 years, 20-24 years, 25+ years | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HAQ mobility | <p>Are you able to walk outdoors on flat ground?</p> <p>Without ANY difficulty With SOME difficulty With MUCH difficulty UNABLE to do</p> <p>If difficulty or unable to: is this due to your arthritis? Yes/no</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WOMAC pain | <p>Think about the pain you felt in your hip/knee during the last 48 hours.</p> <p>Question: How much pain do you have?</p> <table border="1"> <thead> <tr> <th></th> <th>None</th> <th>Mild</th> <th>Moderate</th> <th>Severe</th> <th>Extreme</th> </tr> </thead> <tbody> <tr> <td>1. Walking on a flat surface</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>2. Going up and down stairs</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>3. At night while in bed, pain disturbs your sleep</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>4. Sitting or lying</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>5. Standing upright</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table> | | None | Mild | Moderate | Severe | Extreme | 1. Walking on a flat surface | <input type="checkbox"/> | 2. Going up and down stairs | <input type="checkbox"/> | 3. At night while in bed, pain disturbs your sleep | <input type="checkbox"/> | 4. Sitting or lying | <input type="checkbox"/> | 5. Standing upright | <input type="checkbox"/> |
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| 5. Standing upright | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Thank you very much for your time and the information you shared today.