

Community: Harrow Digital Inclusion and Diabetes Community Club at the Harrow International Christian Centre

Topic: Understanding Type 2 Diabetes, Gum Disease and Strategies for Better Health

On 7 March 2025, we were invited by the Harrow Digital Inclusion and Diabetes Community Club (the “Club”) to speak to members at one of their regular Friday morning meetings, which are held at the Harrow International Christian Centre (HICC). The speaker was Dr Menka (PhD Scholar – Max Institute of Medical Excellence (MIME) & Academy of Scientific and Innovative Research (AcSIR) Visiting Research Fellow, NIHR Imperial Patient Experience Research Centre, (PERC) School of Public Health, Imperial College London).

Background and development of the session

The session came about by an invitation from an Imperial Biomedical Research Centre (BRC) Community Partner for the Metabolic Medicine and Endocrine Imperial BRC research theme, who is on the organising committee of the Harrow Digital Inclusion and Diabetes Community Club, hosted at the HICC.

The Harrow Digital Inclusion and Diabetes Community Club is a social club and peer support group, which meets on Friday mornings at the HICC to:

- share information on topics related to type 2 diabetes
- provide support with IT skills
- run fitness classes
- socialise

Most members of the Club are aged 60+ and include individuals who are either non-diabetic, prediabetic or living with type 2 diabetes. Attendance at sessions averages between 20-25 people, depending on the time of year.

Prior to the session, Dr Menka and Naomi Asantewa-Sechereh (PERC) had a call with a member of the organising committee of the Club to discuss which areas of Dr Menka’s research would be of interest to the members and to finalise the session outline.

Agenda

The agenda of the session was:

- 10:00 am: Arrival and refreshments
- 10:30 am-11:30 am: Talk and Q&A
- 11:30 am: Socialise
- 12:00 pm: Event close

Overview of the session

The session covered the following:

- **Understanding Type 2 Diabetes (T2DM)**
 - What is Diabetes Mellitus
 - Types of Diabetes
 - Prevalence of T2DM
 - Risk Factors of T2DM
 - Symptoms of T2DM
- **Understanding Gum Disease**
 - What is Gum Disease
 - Causes of Gum Disease
 - Stages of Gum Disease
 - Prevalence of Gum Disease
 - Risk factors of Gum Disease
 - Symptoms of Gum Disease
- **Association between Type 2 Diabetes and Gum Disease**
 - Possible explanation of Bidirectional relationship
- **Common Risk Factors for both conditions**
- **Capability, opportunity, and Motivation approach for behaviour change to improve both diseases together (COM-B approach)**
- **Practical tips for better Oral Health and Management of Diabetes**

A PowerPoint presentation was used for visual aids and to convey key information.

Attendees were invited to ask questions throughout the talk if anything wasn't clear. In addition, as Dr. Menka presented, she frequently checked with attendees to ensure they understood and asked if any clarification was needed. Dr. Menka stayed after the talk to speak to the attendees 1:1 and answer their questions.

Attendees

Attendees at the session included:

- 22 Harrow Digital Inclusion and Diabetes Community Club members
- 1 Imperial College London staff/researchers
- 2 Imperial PERC staff members

Session outcomes

Dr Menka asked the attendees the following questions prior to her presentation as a quick way to assess the level of understanding and views, and provided a feedback form to fill out at the end of the session:

Pre-talk questions:

- Do you know what type 2 diabetes is?
- How many of you are suffering from type 2 diabetes?
- Do you know what gum disease is?
- Do you know both type 2 diabetes and gum disease are related?
- Do you know both these diseases have shared risk factors?

The majority of attendees demonstrated awareness of type 2 diabetes, with many reporting a personal history of the condition. Additionally, a significant proportion of attendees were familiar with gum disease. However, none of the attendees were aware of the association between type 2 diabetes and gum disease, including their shared risk factors.

Post-talk questions:

- Do you know that type 2 disease and gum disease are related?
- Do you know that both these diseases have shared risk factors?
- Do you think the COM-B approach (which looks at Capability, Oppportunity, and Motivation, as drivers of Behaviour Change) can help improve gum health and lower blood sugar levels?
- Do you feel like you've learnt something today?

Following the session, the attendees demonstrated an improved understanding of the impact of type 2 diabetes on oral health and vice versa. They reported increased awareness of shared risk factors between diabetes and gum disease. Additionally, attendees were introduced to the COM-B approach, gaining insights into how it can be applied to enhance gum health and contribute to better blood sugar management through behaviour modifications.

Session feedback

At the end of the session, attendees were provided with a feedback form to provide further feedback on what they thought of the session. Of the 22 attendees, 20 attendees completed a feedback form.

They were positive about the session, for example: *"Dr Menka was very good in explaining"*

As shown by responses to the pre-talk questions, none of the attendees was aware that diabetes and gum disease are related, for example: *"I never knew that diabetes could affect the gums or vice versa"* and they appreciated the information shared during the talk.

Of those attendees who completed a feedback form:

- 80% rated the session as good or excellent and 5% rated the session as average (15% did not respond to this question).
- 95% 'Agree' or 'Strongly Agree' with the statement *'I feel more knowledgeable about what causes gum disease'*
- 95% 'Agree' or 'Strongly Agree' with the statement *'I feel more knowledgeable about the association between type 2 diabetes and gum disease'*
- 95% 'Agree' or 'Strongly Agree' with the statement *'I gained a better understanding of how to manage gum disease and/or diabetes'*
- 95% 'Agree' or 'Strongly Agree' with the statement *'I feel more confident that this type of research (such as the project presented today) is important to improve our understanding of the association between T2DM and Gum disease'*

Full details of the completed feedback forms and comments can be found in **Appendix 1** and demographics of attendees can be found in **Appendix 2**.

Questions asked by attendees:

- You talked about the possibility of reversing prediabetes and borderline diabetes. Will you talk to us about how to reverse diabetes?
- How can blood sugar levels be lowered effectively?
- I have been borderline diabetic for over 13 years, my GP put me on medication, but did not send me for regular blood tests.
- My GP says I don't have diabetes despite the symptoms like thirst and eye dryness. What should I do?
- How do you keep a diary of your blood sugar readings?
- If you have diabetes the GP doesn't give you a blood sugar monitor in UK, how do you get the right kit to test yourself at home?
- Should diabetics avoid fasting?
- If I eat every two hours, will it increase my blood sugar levels?
- What are the best sugar alternatives for diabetics?
- Can sweeteners be used instead of sugar?
- How can vegetarians and vegans ensure they get enough protein in their diet?
- Should dairy be included or avoided in a diabetic diet?
- Is massaging the gum with oil is beneficial?
- Is rinsing the mouth with salt and water good for oral health?
- What is the best toothpaste to use?
- Would regular dental check-ups help detect gum disease early?
- Do mouth muscles become more relaxed with age?
- Can loss of taste be caused by a dry mouth? Is this linked to diabetes?

Appendix 1: Feedback from attendees

The responses from the 20 completed feedback forms are written below:

Q1. Overall, how would you rate the session?					
No response	Very bad	Bad	Average	Good	Excellent
3	0	0	1	2	14

Q2. Please rate the following statements:					
a) I feel more knowledgeable about what causes gum disease					
No response	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
0	0	0	1	3	16

b) I feel more knowledgeable about the association between type 2 diabetes and gum disease					
No response	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
0	0	0	1	3	16

c) I gained a better understanding of how to manage gum disease and/or diabetes					
No response	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
1	0	0	1	3	16

d) I feel more confident that this type of research (such as the project presented today) is important to improve our understanding of the association between T2DM and Gum disease					
No response	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
0	0	0	1	3	16

Q3. Do you think the information presented at today's session has helped you in any way? If yes, please let us know how. (Free-text)
Yes, Dr Menka was very good at explaining

We did not know about this before
Yes, I know more about how to care for diabetes and gum disease
Yes indeed
Yes, will make better choices with food
Definitely, I did not know that gum disease was associated with Diabetes till today
Simple and easy to understand
Yes, we should be getting more information all the times
Awareness
Yes
Yes
It has helped as I didn't know about gum disease and diabetes
Yes
Yes
It reaffirmed my knowledge as to how many vegetables are actually sugar-saturated
I wish you to come again
It helped in many ways
Yes
We did not know about this before
I think the information leaves me curious, need to read more.

Q4. What did you like most about the session? (Free-text)
Very interactive
About gum Disease
All that Dr Menka presented
Everything
Well explained
The info on Gum Disease
Well Presented
Yes
Well said about gum disease
The connection between gum disease and diabetes
Presentation
It was easy to participate
How Dr Menka kept to her remit of display and verbal
I would like more of the same
A clear explanation of every subject
It has opened my eyes to encourage my behaviour about diabetes
Very interactive
About gum Disease
All that Dr Menka presented
Everything
Well explained

Q5. What could be done better next time? (Free-text)
A bit more time
More information is needed
Big screen/ overheads
More Poster in Big Print
I have no idea
It was well explained by the young lady
Don't know

Q6. Do you think the COM-B approach (which looks at <u>C</u>apability, <u>O</u>ppportunity, and <u>M</u>otivation, as drivers of <u>B</u>ehaviour Change) can help improve gum health and lower blood sugar levels?			
No response	Yes	No	Not Sure
2	17	0	1

Q7. Do you think treating both gum disease and diabetes together in one program will be useful?			
No response	Yes	No	Not Sure
0	17	0	3

Q8. Please add any other thoughts/ comments, or suggestions about Dr Menka's project presented at today's session (Free-text)
We have gained a better understanding with this talk
Everything that you are doing is very good
Very knowledgeable, eye-opener, and very useful information, a lot to change to improve my chances of controlling/avoiding diabetes and gum disease
Well explained
Well Explained
Nothing to add today's session was perfect
Excellent Presentation
Dr Menka explained things very well
I feel she did excellently, especially in answering everyone's questions and concerns
Thank you for coming, I Pray you will come again

Appendix 2: Attendee demographics

The demographics of attendees taken from the completed feedback forms (n=22/24) are reported below:

Age groups (in years)

Characteristics	Number	%
36-45	1	5
66 – 75	7	35
76 – 85	9	45
86+	1	5
Prefer not to say	2	10

Ethnicity (self-reported)

Characteristic	Number	%
African	1	5
Sri Lankan	1	5
Asian	3	15
South Asian	1	5
Christian	1	5
White Greek	1	5
British	2	10
Caribbean	2	10
Prefer not to say	8	40