

**Study Design:** Convenience Sampling

**Survey Method:** Semi-Structured Survey

**Study Location:** Groote Schuur Hospital, Cape Town

**Main Objective:**

- To determine barriers to behaviour change, baseline access to cell phones and pedometers, and knowledge in using cell phones.

**Specific Objectives:**

- To determine types/capabilities of cell phones owned by obese adults from underprivileged communities of Cape Town who are attending a diabetic clinic at Groote Schuur hospital.
- To determine the cell phone applications used by obese adults from underprivileged communities of Cape Town who are attending a diabetic clinic at Groote Schuur hospital.
- To determine if use through intermediary users is common among patients attending a diabetic clinic.
- To determine knowledge in utilizing cell phones by obese adults from underprivileged communities of Cape Town who are attending a diabetic clinic at Groote Schuur hospital.
- To determine types/capabilities of behaviour self- monitoring devices (pedometer) owned by obese adults from underprivileged communities of Cape Town who are attending a diabetic clinic at Groote Schuur hospital.
- To determine specific barriers to behaviour change.

**Anticipated Outcome:**

- Preliminary user requirements for an intermediated technology to persuade health behaviour change.

Participant No. \_\_\_\_\_

**Sample size:** 20-40 randomly selected patients from Groote Schuur Hospital.

**Section A:** Demographic Questions

1. How old are you (your age range)?
  - (a) Between 18 and 30 years
  - (b) Between 30 and 40 years
  - (c) Between 40 and 50 years
  - (d) Above 50 years old
2. What is your education level?
  - (a) None
  - (b) Primary Level

- (c) Matric Level
- (d) Other \_\_\_\_\_

3. Patient's ethnicity

- (a) Black African
- (b) Coloured
- (c) Indian or Asian
- (d) White
- (e) Other

4. Patient's gender

- (a) Male
- (b) Female

5. Patient's BMI (Body Mass Index) (NB: A scale can be used for getting patient's weight and height)

- Weight \_\_\_\_\_
- Height \_\_\_\_\_

6. Patient's co-morbidities and duration of each co-morbidity

- (a) Type 2 Diabetes
- (b) Cardiovascular diseases
- (c) Cancer
- (d) Other \_\_\_\_\_
- (e) Other \_\_\_\_\_
- (f) Other \_\_\_\_\_
- (g) Other \_\_\_\_\_
- (h) Other \_\_\_\_\_
- (i) Other \_\_\_\_\_

7. Patient's HBA<sub>1</sub>C

\_\_\_\_\_

**NB:** How many times do you check your glucose \_\_\_\_\_

\_\_\_\_\_

8. Patient's blood pressure

\_\_\_\_\_

9. What is your income level?

- (a) Less than R 1000 per month
- (b) Between R 1000 and R 2000 per month
- (c) Between R 2000 and R 3000 per month
- (d) Between R 3100 and R 5000 per month
- (e) Beyond R 5000 per month

10. How much would you spend on a cellphone per month?

- (a) Less than R 30.
- (b) Between R 30 and R 50.
- (c) Between R 51 and R 100.
- (d) Above R 100

**Section B:** Technical questions to determine access to cellphone technology, and knowledge on utilization of cellphones.

11. Do you own a cell phone? **[NB:** If yes , proceed to question 12, else, skip to question 18]

\_\_\_\_\_

12. What model of a cell phone do you have (alternative: Can you show me your cellphone)?

Also ask about where they keep it i.e. in the pocket, in the purse etc.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

13. What functionalities do you use on a cell phone? **(Put a tick where appropriate)**

- (a) Making calls
- (b) Writing and reading SMS
- (c) Browsing Internet
- (d) Writing and reading Email
- (e) Visiting Facebook
- (f) Visiting Twitter
- (g) Chatting on MXit
- (h) For entertainment (Video, Radio, Games etc)
- (i) Others \_\_\_\_\_

14. If someone wants to borrow your phone, would you share it with them **[NB:** If yes, proceed with question 15, else, skip to question 17 ]? \_\_\_\_\_

15. Have you ever given out (share) your phone before? **[NB:** If yes, proceed to question 16, else, skip to question 18]\_\_\_\_\_

16. Who have you ever shared it with?**[NB:** Skip to question 18 after this question]

\_\_\_\_\_

17. Why will you not share it? \_\_\_\_\_

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18. Would you borrow a phone from someone to use? [**NB:** If yes, proceed with question 19, else, skip to question 21] \_\_\_\_\_
19. Have you ever done it before [**NB:** If yes, proceed with question 20, else, skip to question 21]? \_\_\_\_\_
20. What was the reason for borrowing? [**Tick where appropriate**]
- (a) Better functionalities [**List those functionalities**] \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- (b) Airtime
- (c) Other reasons \_\_\_\_\_
21. Would you prefer to get assisted on using a cellphone [**NB:** If yes, proceed to question 22, else, skip to question 26]? \_\_\_\_\_
- \_\_\_\_\_
22. Why do you need assistance? [ **Tick where appropriate**]
- (a) I don't know how to operate some of the functionalities.
- (b) Other reasons \_\_\_\_\_
23. Who would you prefer to assist you on using a cell phone? [**Tick where appropriate**]
- (a) A family member
- (b) A neighbour
- (c) Other \_\_\_\_\_
24. Has someone assisted you before? [**NB:** if yes, proceed to question 25, else, skip to question 26] \_\_\_\_\_
25. What functionalities were you being assisted with? [**NB:** An interviewer should inquire of why did this person need assistance with specific functionalities][**Tick where appropriate**]
- (a) To read or write SMS written in my second language[English]
- (b) To read or write SMS written in my first language[Xhosa or Afrikaans]
- (c) To access other functionalities such as \_\_\_\_\_
- (d) Others \_\_\_\_\_

**Section C:** Questions to determine access to health tips or information, and pedometers

26. Would you prefer to get health tips and information about diet and physical activity from time to time? **[NB: If yes, proceed to question 27, else, skip to question 29]**\_\_\_\_\_
27. Have you ever received health tips or information about diet and physical activity?**[NB: If yes, proceed to question 28, else, skip to question 29]** \_\_\_\_\_
28. How did you receive that information? **(NB: This question aims at determining existing social and technological platforms to persuade patients in health behaviour change) [ Tick where appropriate]**
- (a) Social support group
  - (b) Brochure
  - (c) Website
  - (d) A cellphone app
  - (e) SMS
  - (f) Face to face meeting with a Dietician /Doctor/ Nurse/ Other Person\_\_\_\_\_
  - (g) Other\_\_\_\_\_
29. Would you prefer to record the food eaten and steps you have walked during the day?**[NB: If yes, proceed to question 30, else, skip to question 32]**
30. Have you ever recorded the food you have eaten or the steps you have walked?  
\_\_\_\_\_
31. If yes to question 30, how do you keep record of food eaten and steps walked? **[Tick where appropriate]**
- (a) Using a cellphone app
  - (b) Using a computer software
  - (c) Using a paper diary.
  - (d) Other\_\_\_\_\_
32. How could one keep track of their daily walking steps? **[NB: This is an indirect question that intends to know if patients are aware of pedometers. If the person is not aware of pedometers then explain it to him/her.]**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
33. Would you prefer to use a pedometer to keep track of your physical activity or walking steps? \_\_\_\_\_
34. Have you ever used a pedometer to keep track of your daily walking steps? \_\_\_\_\_

**Section D:** Questions to identify barriers to diet and physical activity.

35. Would you think of any problems that may prevent someone to follow diet? [An indirect question trying to understand barriers in eating healthy] [**Tick where appropriate**]
- (a) Healthy food is so expensive
  - (b) Lack of knowledge on energy density of different foods
  - (c) Lack of knowledge on how to shop for low calorie diet
  - (d) Lack of control on eating habits
  - (e) Availability of many places selling unhealthy food compared to healthy food near homes and work places
  - (f) Other \_\_\_\_\_
36. Would you think of any problems that may prevent someone from doing physical activity [An indirect question trying to understand barriers in physical activity][**Tick where appropriate**]
- (a) Lack of time to do physical activity
  - (b) Lack of areas to do physical activity
  - (c) Going to the gym costs too much money
  - (d) It is difficult to plan for physical activity.
  - (e) People do forget to do a minimum amount of required physical activity
  - (f) Lack of devices to help in tracking of physical activity
  - (g) Lack of awareness that physical activities are important
  - (h) Lack of motivation to do physical activity
  - (i) Other \_\_\_\_\_