

Diabetic Knowledge, Attitude, Practice Questionnaire

Participant Number (Office use): _____

Date: _____

A. PARTICIPANT INFORMATION

1. Full name: _____

2. Age: _____

3. Gender: ☐ Male ☐ Female

4. Address: _____

5. Glycemia: _____ mmol/L

6. HbA1C: _____ %

B. DIABETIC KNOWLEDGE

Please circle in the letter that you think is the best.

1. What is diabetes?

- A. Diabetes is a disease of Sugar
- B. Diabetes is a disease spread in the community

2. How many types of diabetes are there?

- A. 1 type
- B. 2 types

3. What is type 2 diabetes?

- A. The body does not produce insulin
- B. Insulin secrets in the body does not work right

4. Who is at risk for diabetes?

- A. People who are obese, sedentary life style, eat a lot of fat, sweet, starch, alcohol, tobacco, family history of diabetes
- B. People wo are not obese, do regular exercise, do not have family history of diabetes

5. What are diabetic symptoms?

- A. Eat a lot, drink a lot, lose weight a lot, urinate a lot
- B. Eat less, lose weight, urinate often

6. How many types of diabetic complication are there?

- A. One type: acute complications
- B. Two types: acute complications and chronic complications

7. What are the acute complications of diabetes mellitus?

- A. Hyperglycaemia and foot ulcer
- B. Hypoglycaemia and coma, ketoacidosis and Infections

8. What are the chronic complications of diabetes mellitus?

- A. Cardiovascular complications, decreased vision, kidney failure, foot ulcers
- B. Insomnia, anxiety, difficulty breathing

9. How do you reduce diabetic complications?

- A. Routine blood glucose testing, prescription medication, reasonable eating, proper exercise
- B. Test whenever you want, just taking the medicine is enough without don't need the well eating and exercise

10. What are the signs of hypoglycaemia in diabetic patients?

- A. Uncomfortable, sweating, dizziness, blurry vision
- B. Abdominal pain, difficulty breathing

C. DIABETIC ATTITUDE

Please circle the answer you choose

1. Do you feel that blood glucose testing for you is necessary?

- | | | | | |
|-------------------|-------|---------|----------|----------------------|
| ① | ② | ③ | ④ | ⑤ |
| Strongly
Agree | Agree | Neither | Disagree | Strongly
Disagree |

DIABETES KAP_STUDY QUESTIONNAIRE

2. Do you agree that blood sugar can be controlled by exercise, sports and medicine?

- | | | | | |
|-------------------|-------|---------|----------|----------------------|
| ① | ② | ③ | ④ | ⑤ |
| Strongly
Agree | Agree | Neither | Disagree | Strongly
Disagree |

3. Do you agree with a reasonable diet that can control blood sugar?

- | | | | | |
|-------------------|-------|---------|----------|----------------------|
| ① | ② | ③ | ④ | ⑤ |
| Strongly
Agree | Agree | Neither | Disagree | Strongly
Disagree |

4. Do you agree with the need to have regular medical check-ups and blood sugar checks?

- | | | | | |
|-------------------|-------|---------|----------|----------------------|
| ① | ② | ③ | ④ | ⑤ |
| Strongly
Agree | Agree | Neither | Disagree | Strongly
Disagree |

5. Do you agree that complications due to diabetes are a very serious problem?

- | | | | | |
|-------------------|-------|---------|----------|----------------------|
| ① | ② | ③ | ④ | ⑤ |
| Strongly
Agree | Agree | Neither | Disagree | Strongly
Disagree |

DIABETES KAP_STUDY QUESTIONNAIRE

6. Do you agree that prevention of complications is important in managing diabetes?

①	②	③	④	⑤
Strongly Agree	Agree	Neither	Disagree	Strongly Disagree

7. Do you agree that daily exercise can control diabetes complications?

①	②	③	④	⑤
Strongly Agree	Agree	Neither	Disagree	Strongly Disagree

8. Do you agree about worrying about hypoglycaemic complications?

①	②	③	④	⑤
Strongly Agree	Agree	Neither	Disagree	Strongly Disagree

9. Do you agree with taking care of your feet while treating diabetes?

①	②	③	④	⑤
Strongly Agree	Agree	Neither	Disagree	Strongly Disagree

10. Do you agree that diabetes can be well managed?

- | | | | | |
|-------------------|-------|---------|----------|----------------------|
| ① | ② | ③ | ④ | ⑤ |
| Strongly
Agree | Agree | Neither | Disagree | Strongly
Disagree |

D. DIABETIC PRACTICE

Please answer all the questions below

1. Which diabetes treatment method you follow?

- ☐ Oral medicine.
How many tablets per day? ____ tablets. How many times per day? ____ times
- ☐ Insulin injection.
How many times of injection? _____ times. _____ Units of insulin.
Injection site? _____

2. Do you monitor blood sugar by blood tests? ____ Yes / ____ No _____ Regular interval.

3. Do you exercise regularly? ____ Yes / ____ No

How long in a day? _____ How many days per week? _____

4. Which method do you exercise?

- ☐ Walking
- ☐ Swimming
- ☐ Dancing
- ☐ Cycling

DIABETES KAP_STUDY QUESTIONNAIRE

☐ Yoga

☐ Gym

Do you know exercise can lower blood sugar? ____ Yes / ____ No

5. How many meals do you eat a day? _____

Should you skip meals? _____ Yes / _____ No

6. What kind of food intake do you need to limit or reduce?

7. Do you have habit of smoking, chewing and drinking? _____ Yes / _____ No

8. Have you ever had hypoglycaemia? ____ has ____ not yet

If so, how did you handle it? _____

9. Have you ever had hyperglycaemia? ____ has ____ not yet

If so, how did you handle it? _____

10. How do you take care of your feet?

THANK YOU FOR YOUR ANSWERS

Morisky Medication-Taking Adherence Scale-MMAS (4-item)

English Version

	YES	NO
1. Do you ever forget to take your Diabetes medicine?	☐	☐
2. Do you ever have problems remembering to take your diabetes medication?	☐	☐
3. When you feel better, do you sometimes stop taking your diabetes medicine?	☐	☐
4. Sometimes if you feel worse when you take your diabetes medicine, do you stop taking it?	☐	☐

MEASUREMENT AND SCORING CRITERIA

The MMAS is a generic self-reported, medication-taking behavior scale in which the specific health issue (high blood pressure, diabetes, elevated cholesterol, HIV, contraception, etc.) is inserted for the “health concern”.

**The MMAS consists of four items with a scoring scheme of “Yes” = 0 and “No” = 1.
The items are summed to give a range of scores from 0 to 4.**

DIABETES DISTRESS SCALE - DDS

DIRECTIONS: Living with diabetes can sometimes be tough. There may be many problems and hassles concerning diabetes and they can vary greatly in severity. Problems may range from minor hassles to major life difficulties. Listed below are 17 potential problem areas that people with diabetes may experience. Consider the degree to which each of the 17 items may have distressed or bothered you DURING THE PAST MONTH and circle the appropriate number.

Please note that we are asking you to indicate the degree to which each item may be bothering you in your life, NOT whether the item is merely true for you. If you feel that a particular item is not a bother or a problem for you, you would circle "1". If it is very bothersome to you, you might circle "6".

	Not a Problem	A Slight Problem	A Moderate Problem	Somewhat Serious Problem	A Serious Problem	A Very Serious Problem
1. Feeling that my doctor doesn't know enough about diabetes and diabetes care.	1	2	3	4	5	6
2. Feeling that diabetes is taking up too much of my mental and physical energy every day.	1	2	3	4	5	6
3. Not feeling confident in my day-to-day ability to manage diabetes.	1	2	3	4	5	6
4. Feeling angry, scared and/or depressed when I think about living with diabetes.	1	2	3	4	5	6

5. Feeling that my doctor doesn't give me clear enough directions on how to manage my diabetes.	1	2	3	4	5	6
6. Feeling that I am not testing my blood sugars frequently enough.	1	2	3	4	5	6
7. Feeling that I will end up with serious long-term complications, no matter what I do.	1	2	3	4	5	6
8. Feeling that I am often failing with my diabetes routine.	1	2	3	4	5	6

DDS 5.8.15 © William H. Polonsky & Lawrence Fisher

	Not a Problem	A Slight Problem	A Moderate Problem	Somewhat Serious Problem	A Serious Problem	A Very Serious Problem
9. Feeling that friends or family are not supportive enough of self-care efforts (e.g., planning activities that conflict with my schedule, encouraging me to eat the "wrong" foods).	1	2	3	4	5	6
10. Feeling that diabetes controls my life.	1	2	3	4	5	6
11. Feeling that my doctor doesn't take my concerns seriously enough.	1	2	3	4	5	6
12. Feeling that I am not sticking closely enough to a good meal plan.	1	2	3	4	5	6
13. Feeling that friends or family don't appreciate how difficult living with diabetes can be.	1	2	3	4	5	6
14. Feeling overwhelmed by the demands of living with diabetes.	1	2	3	4	5	6



RDP_RESEARCH PROTOCOL_DDS



15. Feeling that I don't have a doctor who I can see regularly enough about my diabetes.	1	2	3	4	5	6
16. Not feeling motivated to keep up my diabetes self-management.	1	2	3	4	5	6
17. Feeling that friends or family don't give me the emotional support that I would like.	1	2	3	4	5	6

DDS17 SCORING SHEET

INSTRUCTIONS FOR SCORING:

The DDS17 yields a total diabetes distress score plus 4 subscale scores, each addressing a different kind of distress.¹ To score, simply sum the patient's responses to the appropriate items and divide by the number of items in that scale.

Current research² suggests that a mean item score 2.0 – 2.9 should be considered 'moderate distress,' and a mean item score ≥ 3.0 should be considered 'high distress.' Current research also indicates that associations between DDS scores and behavioral management and biological variables (e.g., A1C) occur with DDS scores of ≥ 2.0 . Clinicians may consider moderate or high distress worthy of clinical attention, depending on the clinical context.



RDP_RESEARCH PROTOCOL_DDS



We also suggest reviewing the patient's responses across all items, regardless of mean item scores. It may be helpful to inquire further or to begin a conversation about any single item scored ≥ 3 .

Total DDS Score: a. Sum of 17 item scores.
b. Divide by: 17
c. Mean item score: _____
Moderate distress or greater? (Mean item score > 2) yes__ no__

A. Emotional Burden: a. Sum of 5 items (2, 4, 7, 10, 14) _____
b. Divide by: 5
c. Mean item score: _____
Moderate distress or greater? (Mean item score > 2) yes__ no__

B. Physician Distress: a. Sum of 4 items (1, 5, 11, 15) _____
b. Divide by: 4
c. Mean item score: _____
Moderate distress or greater? (Mean item score > 2) yes__ no__

C. Regimen Distress: a. Sum of 5 items (6, 8, 3, 12, 16) _____
b. Divide by: 5
c. Mean item score: _____
Moderate distress or greater? (Mean item score > 2) yes__ no__

D. Interpersonal Distress: a. Sum of 3 items (9, 13, 17) _____
b. Divide by: 3 c. Mean item score: _____
Moderate distress or greater? (Mean item score ≥ 2) yes__ no



RDP_RESEARCH PROTOCOL_DDS



1. Polonsky, W.H., Fisher, L., Esarles, J., Dudl, R.J., Lees, J., Mullan, J.T., Jackson, R. (2005). Assessing psychosocial distress in diabetes: Development of the Diabetes Distress Scale. Diabetes Care, 28, 626-631.
2. Fisher, L., Hessler, D.M., Polonsky, W.H., Mullan, J. (2012). When is diabetes distress clinically meaningful? Establishing cut-points for the Diabetes Distress Scale. Diabetes Care, 35, 259-264.

WHOQOL-BREF_RDP

Patient Number: Age: Sex: M/F Weight: Height:

Address/ contact Number:

		Very poor	Poor	Neither poor nor good	Good	Very good
1	How would you rate your quality of life?	1	2	3	4	5

		Very dissatisfied	Fairly Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
2	How satisfied are you with your health?	1	2	3	4	5

The following questions ask about how much you have experienced certain things in the **last two weeks**.

		Not at all	A Small amount	A Moderate amount	A great deal	An Extreme amount
3	To what extent do you feel that physical pain prevents you from doing what you need to do?	1	2	3	4	5
4	How much do you need any medical treatment to function in your daily life?	1	2	3	4	5

HRQOL QUESTIONNAIRE_WHOQOL-BREF_RDP

5	How much do you enjoy life?	1	2	3	4	5
6	To what extent do you feel your life to be meaningful?	1	2	3	4	5

		Not at all	Slightly	Moderately	Very	Extremely
7	How well are you able to concentrate?	1	2	3	4	5
8	How safe do you feel in your daily life?	1	2	3	4	5
9	How healthy is your physical environment?	1	2	3	4	5

		Not at all	Slightly	Somewhat	To a great extent	Completely
10	Do you have enough energy for everyday life?	1	2	3	4	5
11	Are you able to accept your bodily appearance?	1	2	3	4	5

HRQOL QUESTIONNAIRE_WHOQOL-BREF_RDP

12	Have you enough money to meet your needs?	1	2	3	4	5
13	How available to you is the information you need in your daily life?	1	2	3	4	5
14	To what extent do you have the opportunity for leisure activities?	1	2	3	4	5

		VERY POOR	POOR	NEITHER POOR NOR GOOD	GOOD	VERY GOOD
15	How well are you able to get around physically?	1	2	3	4	5

The following questions ask you to say how good or satisfied you have felt about various aspects of your life over the over the **last two weeks**.

		Very Dissatisfied	Fairly Dissatisfied	Neither Satisfied nor dissatisfied	Satisfied	Very satisfied
16	How satisfied are you with your sleep?	1	2	3	4	5
17	How satisfied are you with your ability to perform your daily living activities?	1	2	3	4	5
18	How satisfied are you with your capacity for work	1	2	3	4	5

19	How satisfied are you with yourself?	1	2	3	4	5
20	How satisfied are you with your personal relationships?	1	2	3	4	5
21	How satisfied are you with your sex life?	1	2	3	4	5
22	How satisfied are you with the support you get from your friends?	1	2	3	4	5
23	How satisfied are you with the conditions of your living place?	1	2	3	4	5
24	How satisfied are you with your access to health services?	1	2	3	4	5
25	How satisfied are you with your transport?	1	2	3	4	5

The following question refers to **how often** you have felt or experienced certain things in the last two weeks.

		Never	Infrequently	Sometimes	Frequently	Always
26	How often do you have negative feelings such as blue mood, despair, anxiety or depression?	1	2	3	4	5

THE END

WHOQOL-BREF assesses four domains of quality of life: Physical Health, Psychological, Social Relationships and The Environment.

It is possible to derive four domain scores from the WHOQOL-BREF. The four domain scores denote an individual's perception of quality of life in each particular domain.

Calculating domain scores involves two steps

STEP1: Calculate raw scores for each domain using the table below

DOMAIN	EQUATION FOR COMPUTING DOMAIN SCORES	RAW SCORE
1. Physical Health	$(6-Q3) + (6-Q4) + Q10 + Q15 + Q16 + Q17 + Q18$ $+ \quad + \quad + \quad + \quad + \quad +$	=
2. Psychological	$Q5 + Q6 + Q7 + Q11 + Q19 + (6-Q26)$ $+ \quad + \quad + \quad + \quad +$	=
3. Social relationships	$Q20 + Q21 + Q22$ $+ \quad +$	=
4. Environment	$Q8 + Q9 + Q12 + Q13 + Q14 + Q23 + Q24 + Q25$ $+ \quad + \quad + \quad + \quad + \quad + \quad +$	=

For instance, to calculate the Physical Health domain raw score, note down the client's responses to each of the relevant questions.

QUESTION	CLIENTS RESPONSE
Question 3	Very much= 4
Question 4	A moderate amount = 3
Question 10	A little = 2
Question 15	Poor = 2
Question 16	Satisfied = 4
Question 17	Satisfied = 4
Question 18	Very Satisfied = 5

STEP: 2

Convert raw scores to a transformed scores (on a 0-100 scale) using tables for each domain on the next page (i.e. if a client's raw score on the Physical Health domain is 22 then their transformed score will be 56)

INTERPRETATION

Higher transformed scores on each of the domains indicates higher quality of life in that particular area (i.e., someone who scores 75 on the Social relationships domain has a higher perceived quality of life in relation to Social Relationships than someone who scores 25)

Cost Of Illness Questionnaire _ RDP Study

Cost of Illness Questionnaire [COIQ]

Patient Number: Age: Sex: M/F Weight: Height:

Address/ contact Number:

EDUCATIONAL QUALIFICATION:

Illiterate	
Primary school (Class 1-4)	
Middle school (class 5-7)	
High school (class 8-10)	
Diploma course	
Degree and above	
Others (specify)	

OCCUPATION:

Non worker
Self employed
Employed
Cultivator
Labourer (Agri)
Labourer (others)
Retired (not on pension)
Pensioner
Housewife
Student
Others (specify)

Diagnosis: Type-2 Diabetes mellitus +

Year of diagnosis:

Place of Residence: Rural/ Urban

DIRECT COSTS

1. Direct Medical cost:

1.1 Cost of Drugs for One Month:

Drugs	Dose	Frequency	Cost in Rupees
Insulin			
Insulin pen /syringe			
Oral hypoglycaemic Agents			
Other drugs			

1.2 Cost of Investigations: In the last 1 month, how much you spent for the following investigations?

Investigation	Frequency	Cost in rupees
FBS		
PPBS		
GTT		
HBA1C		
RBS		
Lipid profile		
Creatinine		
Urea		
Eye Check Up		
Glucometer		
Any Other Test		

1.3 Cost of Consultation:

No of time visit/month:

Consultation fee:

Total fees in rupee:

1.4 Cost of Hospitalization

Transport to attendant /patient	
Fees for tests	
Fees for bed	
Consultancy fees	
Fee for nursing care	
Food for patient /attendant	
Treatment cost	
Other expenses (specify)	

1.5 Cost of Interventions

Interventions	Frequency	Rupees
Dialysis		
Cardiac intervention		
Any other		

2. Direct Non-Medical Cost:

2.1 Transportation

Transport to	Frequency	Rupees
Visit to physician		
Visit to hospital		
Visit to lab		
Others		

3. Indirect Cost Includes

3.1 days lost from work or productivity

Monthly /yearly income:

Days lost from work or productivity:

Cost involved: