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APPENDICES 1 : Research Definitions

Model for DM Prevention and Control : It consist of two main systems; the screening & treatment system and the support system. (The detail is shown in Page 4 - 12)

Health personnel : The personnel in Yasothon Province (Loengnoktha, Kudchum and Korwang Districts) who have responsibility to prevention and control of DM in Yasothon including doctors, nurses who work in the DM Clinic, pharmacists, lab investigator, card recorder and health personnel who are responsible to this job in the hospital and health centers.

Village Health Volunteers (VHVs) : The people who are volunteer to screen the target group in the village and live in Loengnoktha, Kudchum and Korwang Districts.

Diabetes Mellitus Patients : The patients who the doctors have diagnosed as having diabetes mellitus and who have been looked after by health personnel and live in Loengnoktha, Kudchum and Korwang District.

Target Group : It consists of new cases and old cases and live in Loengnoktha, Kudchum and Korwang Districts, namely

1. New cases are people 40 years old in this year or over 40 years old but never screened.
2. Old cases are divided into two groups, namely
 - 2.1 People who are screened two or three years ago and their urine are normal and
 - 2.2 People who have DM symptom or/and DM risk factors.

Risk Factors : The risk factors in target group namely family DM history, obesity, use of an immune depressive drug and have DM symptom namely polyurea, polydipsia and chronic itching.

Policy : Policy of the prevention and control of Diabetes Mellitus in Yasothon Province are

1. Focusing on health promotion for behavioral improvement will result in a decrease in risk factors, diseases and their severity.
2. Screening of the DM patients in target group.
3. Focusing on treatment in accordance with the doctor's plan and properly and continuously following up by health personnel.
4. The referral system focuses on decreasing the density of DM hospital patients by increasing the potential of health personnel in health centers to look after these patients in communities.
5. Effective data collection concerning DM patients will be useful for planning.

Policy Objectives

1. To identify those at risk of being DM patients so they can be looked after early and in doing so avoid the complications of DM.
2. To decrease the density of DM hospital patients.
3. The DM patients are convenient and their expenses are decreased.
4. The DM patients are looked after systematically and continuously.
5. The data collection of DM patients is systematic.
6. To develop the working potential of health personnel.

Policy Targets

1. 90 % of the target group have been detected early by screening.

2. 90 % of the target group screened by urine strips who are abnormal must be seen by the doctor.
3. 100 % of DM patients (old & new cases) are looked after by doctor's plan.
4. 80 % of DM patients and target groups (urine positive in old & new cases) are continuously followed up by health personnel.

Hospital : Loengnoktha, Kudchum and Korwang Hospitals

District Health Office : District Health Offices in Loengnoktha, Kudchum and Korwang Districts

Health Center : Health centers in Loengnoktha, Kudchum and Korwang District are as follows :

- Loengnoktha District including Wai and Kudchiengmee
- Kudchum District including Naso and Phonyam
- Korwang District including Phonmaung and Toom

Information system : The DM information system consists of

- DM data collection in the communities, the health centers, the hospitals, the district health centers and the Yasothon provincial health office
- DM register and analyse by the central registry program of DM
- Transfer DM patients data from the community \longleftrightarrow the health center or the hospital \longleftrightarrow the district health office \longleftrightarrow the Yasothon Provincial Health Office

Fasting Blood Sugar (FBS) : FBS is blood sugar level in the morning (the DM patients must not eat anything except pure water at least six hours before check up)

Non-Insulin-dependent-Diabetes Mellitus (NIDDM) : NIDDM is a type of DM . It doesn't need insulin to decrease blood sugar except some conditions and able to treat by non-pharmacological care or diet control or integrate with pharmacological care.

Bis in die (B.i.d) : Twice a day

APPENDICES 2 : Research Instruments

**In - Depth Interview Form for Evaluation of the Model for
Diabetes Mellitus Prevention and Control in Yasothon Province**

Form 1 : The Doctor in the Hospital

Issue :

1. Do you know what the model for DM prevention and control in Yasothon is? If you do, how did you obtain it?
2. Did you receive an explanation concerning activities and strategies of this model?
3. Was the explanation clear?
4. Who treat the DM patients in the old cases?
5. Who treat the DM patients in the new cases?
6. How do you treat the DM patients in accordance with the doctor's plan?
7. Who refer the DM patients to health centers?
8. Do you know what the criteria used to refer DM patients to the health center are? If you do, what are they?
9. Do you know what the criteria used to refer DM patients to the hospital are? If you do, what are they?
10. Did you relay the knowledge of DM and caring for DM patients to others health personnel? If you did, please describe what you have done.
11. Did you have any problems of DM patients' treatment? If you did, what are they?
12. Did you have any problem of implementation in accordance with this model? If you did, what are they?
13. What are the improvements and suggestions about the model?

Form 2 : The Nurse Who Work in DM Clinic

Issue :

1. Do you know what the model for DM prevention and control in Yasothon is? If you do, how did you obtain it?
2. Did you receive an explanation concerning activities and strategies of this model?
3. Was the explanation clear?
4. Do you gain knowledge and suggestions from working in accordance with this model?
5. How many times does your hospital run DM Clinic in a week?
6. How many DM patients are there in a DM Clinic on average?
7. What are the DM patients services in the DM Clinic?
8. How many health personnel, holding different branches and being responsible for DM, are there in the clinic?
9. Do you think the correct role of health personnel in the DM Clinic is appropriate? Why?
10. Who treat the DM patients in old cases?
11. Who treat the DM patients in new cases?
12. Who is in charge appointments of the DM patients for next check-up following?
13. Who refer the DM patients to the health center?
14. Do you know what the criteria used to refer DM patients to the health center are? If you do, what are they?
15. Do you know what the criteria used to refer DM patients to the hospital are? If you do, what are they?

16. Did you have any problems of services in the DM clinic? If you did, what are they?
17. Did you have any problem of implementation in accordance with this model? If you did, what are they?
18. What are the improvements and suggestions about the model?

Form3 : The Pharmacist in the Hospital

Issue :

1. Do you know what the model for DM prevention and control in Yasothon is? If you do, how did you obtain it?
2. Did you receive an explanation concerning activities and strategies of this model?
3. Was the explanation clear?
4. Do you gain knowledge and suggestions from working through to this model?
5. How did you provide urine strip, blood strips and medicine to serviced DM patients?
6. Did you have any problems of DM patients' service providing? If you did, what are they?
7. Did you have any problem of implementation in accordance with this model? If you did, what are they?
8. What are the improvements and suggestions about the model?

Form4 : The Lab Investigator in the Hospital

Issue :

1. Do you know what the model for DM prevention and control in Yasothon is? If you do, how did you obtain it?
2. Did you receive an explanation concerning activities and strategies of this model?
3. Was the explanation clear?
4. Do you gain knowledge and suggestions from working in accordance with this model?
5. How did you check FBS of DM patients in the hospital?
6. Did you have any problems of FBS checking? If you did, what are they?
7. Did you relay on the knowledge about methodology to test urine sugar by urine strip? If you did, please describe what you have done.
8. Did you relay on the knowledge about methodology to test blood sugar by Glucometer? If you did, please describe what you have done.
9. Did you have any problem of implementation in accordance with this model? If you did, what are they?
10. What are the improvements and suggestions about the model?

Form5 : 'The Card Recorder in the Hospital

Issue :

1. Do you know what the model for DM prevention and control in Yasothon is? If you do, how did you obtain it?
2. Did you receive an explanation concerning activities and strategies of this model?
3. Was the explanation clear?
4. How did you receive DM card?
5. Did you gain knowledge and suggestions for using program and reporting the results? If you did, please describe how you gain them.
6. Did you use the DM central registry program? If you did, please describe what you have done.
7. Do you know how the DM patients in your hospital are reiteration? If you do, please describe how you know.
8. Did you have any problems of DM central registry program? If you did, what are they?
9. Did you have any problem of implementation in accordance with this model? If you did, what are they?
10. What are the improvements and suggestions about the model?

**Form6 : The Health Personnel Who are Responsible to NCD
in the Hospital**

Issue :

1. Do you know what the model for DM prevention and control in Yasothon is? If you do, how did you obtain it?
2. Did you receive an explanation concerning activities and strategies of this model?
3. Was the explanation clear?
4. Do you gain knowledge and suggestions from working in accordance with this model?
5. Did you screen the target group in the community last year? Who was the screener?
6. How did you screen the target group?
7. Did you refer the target group who have abnormal urine to check FBS in the hospital? If you did, please describe what you have done.
8. Did you follow up the target group who have abnormal urine or have risk factors? If you did, please describe what you have done.
9. Did you have any the problems for screening? If you did, what are they?
10. Do you know what the criteria used to refer DM patients to the health center are? If you do, what are they?
11. Do you know what the criteria used to refer DM patients to the hospital are? If you do, what are they?
12. Did you monitor and supervise the health personnel in the health center last year? If you did, please describe what you have done.

13. Did you have any the problems for monitoring and supervision? If you did, what are they?
14. Did you have any problem of implementation in accordance with this model? If you did, what are they?
15. What are the improvements and suggestions about the model?

Form 7 : Health Personnel Who are Responsible to NCD in District**Health Office**

Issue :

1. Do you know what the model for DM prevention and control in Yasothon is? If you do, how did you obtain it?
2. Did you receive an explanation concerning activities and strategies of this model?
3. Was the explanation clear?
4. Do you gain knowledge and suggestions from working in accordance with this model?
5. Did you plan to use urine strips, blood strips and medicine for supporting the health centers? If you did, please describe what you have done.
6. Did you have any problems for planning to use urine strips, blood strips and medicine for supporting the health centers? If you did, what they are.
7. Did you monitor and supervise the health personnel in the health center last year? If you did, please describe what you have done.
8. Did you have any problems for monitoring and supervision? If you did, what are they?
9. Did you have any problem of implementation in accordance with this model? If you did, what are they?
10. What are the improvements and suggestions about the model?

**Form 8 : Health Personnel Who are Responsible to NCD. in the
Health Center**

Issue :

1. Do you know what the model for DM prevention and control in Yasothon is? If you do, how did you obtain it?
2. Did you receive an explanation concerning activities and strategies of this model?
3. Was the explanation clear?
4. Do you gain knowledge and suggestions from working in accordance with this model?
5. Did you screen the target group in the community last year? Who was the screener?
6. How did you screen the target group?
7. Did you refer the target group who have abnormal urine to check FBS in the hospital? If you did, please describe what you have done.
8. Did you follow up the target group who have abnormal urine or having risk factors? If you did, please describe what you have done.
9. Did you have any problems for screening? If you did, what are they?
10. How many times does the health center run a DM Clinic in a week?
11. How many DM patients are there in a DM Clinic on average?
12. What are the DM patients services in the DM Clinic?
13. How did you check FBS of DM patients in the health center?
14. Did you have any problems of FBS checking? If you did, what are they?
15. Who treat the DM patients?
16. Who is in charge of appointments for the DM patients for next following check-up?

17. Who refer the DM patients to the health center?
18. Do you know what the criteria used to refer DM patients to the health center are? If you do, what are they?
19. Do you know what the criteria used to refer DM patients to the hospital are? If you do, what are they?
20. Did you have any problems of service in the DM clinic? If you did, what are they?
21. Did you plan to use urine strips, blood strips and medicine? If you did, please describe what you have done.
22. Did you have any problems for planning to use urine strips, blood strips and medicine? If you did, what they are.
23. Did you monitor and supervise the VHVs in the CPHCC last year? If you did, please describe what you have done.
24. Did you have any problems for monitoring and supervision? If you did, what are they?
25. Did you have any problem of implementation in accordance with this model? If you did, what are they?
26. What are the improvements and suggestions about the model?

**Focus Group Discussion Form for Evaluation of the Model for
Diabetes Mellitus Prevention and Control in Yasothon Province**

Form 9 : The VHVs in the Village

Issue :

1. Do you know what the model for DM prevention and control in Yasothon is? If you do, how did you obtain it?
2. Did you receive an explanation concerning activities and strategies of this model?
3. Was the explanation clear?
4. Do you know who is the target group? If you do, how did you check the number of target group?
5. Did you screen the target group in the community last year? Who was the screener?
6. How did you screen the target group?
7. Did you refer the target group who has abnormal urine to check FBS in the hospital? If you did, please describe what you have done.
8. Did you follow up the target group who have abnormal urine or having risk factors? If you did, please describe what you have done.
9. Did you have any problems for screening? If you did, what are they?
10. Did you gain knowledge of DM? If you did please describe what you have done.
11. Did you gain knowledge of caring for DM patients? If you did please describe what you have done.
12. Did you gain knowledge of methodology to test urine sugar by urine strip? If you did please describe what you have done.

ต้นฉบับ หน้าขาดหาย

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