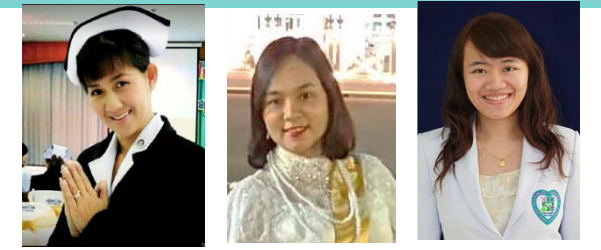# Self-monitoring of Blood Glucose among Patients with Poor Control of Type 2 Diabetes Mellitus in the 7 Southernmost Provinces (Health Network Region 12)

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Background and significance

Diabetes is a significant and growing global health problem, recognized by World Health Organization and the International Diabetes Federation (IDF). In 2009, it was estimated that there were 246 million adults with diabetes throughout the world, with an increasing number up to 380 million expected by 2025. It is the most common cause of OPD and IPD cases, therefore high cost, care is not avoidable.

Only 36.58% of DM patients could control their blood sugar level, but lower than the target (40%).
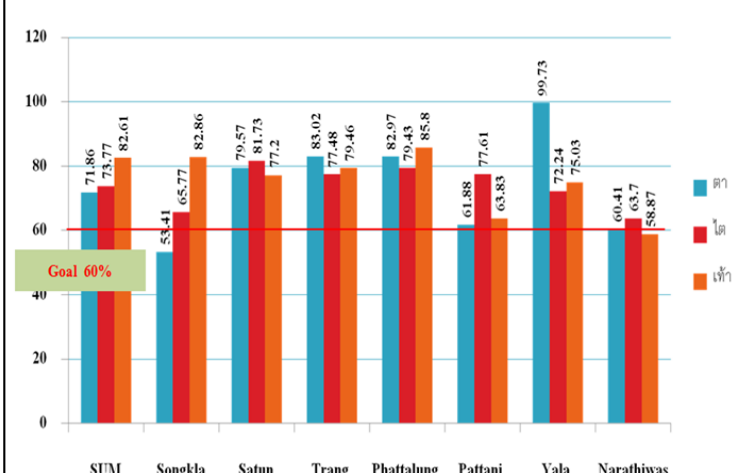
Poor controlled blood glucose bring DM patients about its complications such as cardiovascular, kidney, eye problems, foot, and disability due to stroke.

Percentage of diabetic patients with good glycemic control. Health Network Region 12
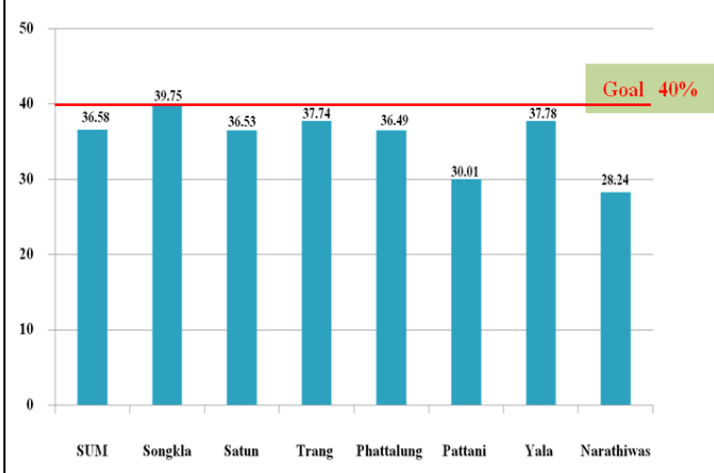
Percentage of diabetic patients with complications. Health Network Region 12

Conclusions and Recommendations

- The follow-up of the self-monitoring blood glucose levels could promote awareness of self-management among the patients with Diabetes.

- The continuity and sustainability of the practices should be concerned.

Objective

- This study aims to assess self-monitoring blood glucose levels among patients with uncontrolled Type 2 diabetes mellitus (DM) in the 7 southernmost provinces (Health Network Region 12).

Study Method

- **Design** : Quasi-experimental research design
  One group pre-test-post-test design.
- **Setting :** 29 hospitals in 7 provinces of the southernmost Thailand.
- **Participants :** 650 patients with uncontrolled of type 2 Diabetes who received care at the DM clinic
- **Indicators of the blood level control**
  : Fasting Plasma Glucose (FPG)
- **Data was analyzed**
  : Descriptive statistics and paired t-test.

Results

- 77.61% (498) of participants were female with the average age of 45-54 years old (50.20%)

- Most of marital status were marry (88.75%), Education is the most elementary school level (69.60%)

- After a 3 month of the program, the means of FBS levels, and the HbA1C were significantly (p< .01) lower than those before the program.

References

- **World Health Organization [WHO]**. (2009). Guideline for the Prevention, Management and Care of Diabetes Mellitus. Retrieved May 16, 2009, from http://apps.who.int/iris/bitstream/10665/42642/1/9241590483_spa.pdf
- **Self-Monitoring - International Diabetes Federation (IDF)**. (2009), form https://www.idf.org/component/attachments/attachments.html.