and severe hypoglycemia (glucose level <50mg/dL on the CGMS), and other parameters, between the patients treated with insulin, SU, or glinides and the patients treated without them. We performed the same comparison between the group of HbA1c less than 8% and the group of HbA1c 8% or more.

Results: The percentage of hypoglycemia time was significantly higher in the patients treated with these 3 class drugs than the patients treated without them  $(2.8\pm6.6\% \text{ vs. }0.7\pm1.7\%, \text{P=0.0011})$ . The percentage of hypoglycemia time was significantly higher in the patients with HbA1c less than 8% than the patients with HbA1c 8% or more  $(3.2\pm7.1\% \text{ vs. }1.1\pm2.9\%, \text{P=0.0352})$ . Compared with the patients without hypoglycemia, the patients with hypoglycemia had significantly lower BMI  $(20.9\pm4.5\text{kg/cm}^2 \text{ vs. }23.0\pm4.3\text{kg/cm}^2, \text{P=0.0118})$ . The average insulin total daily dose in the patients with hypoglycemia was more than that of the patients without hypoglycemia  $(14.4\pm15.5 \text{ units vs. }9.2\pm13.0 \text{ units, P=0.0297})$ .

Conclusion: In the 65 years or more elder patients with diabetes, the patients treated with insulin, SU or glinides had hypoglycemic risk. It is necessary to carry out the optimal blood glucose control comprehensively by HbA1c, CGMS and other predictors, in order not to cause hypoglycemia in the elderly patients with diabetes.

## APPLICATION OF PEPTIDES FOR COMPLEX TREATMENT OF AUTOIMMUNE THYROIDITIS

D. Gorgiladze, R. Pinaev, V. Aleksandrov, Scientific and Production Center of Revitalization and Health, Saint-Petersburg, Russian Federation

**Background:** Improvement the existing methods of treatment of autoimmune thyroiditis by using complex application of low molecular weight peptides.

Methods: We have conducted a study of the effectiveness of treatment in 218 patients with autoimmune thyroiditis aged from 39 - 51 years. All peptide preparations used in this study, were developed by the St. Petersburg Institute of Bioregulation and Gerontology, and are essentially complexes of low molecular weight peptides with a molecular weight up to 5000 Da, isolated from thyroid and pineal glands of young animals. We measured: indicators of the thyroid hormones levels, indicators of the antibodies levels, indicators of high-fidelity infrared thermography and ultrasonography of thyroid gland.

Results: It was revealed that application of a complex of peptides of thyroid and pineal glands in patients with auto-immune thyroiditis helped to improve general health and laboratory indicators. This complex also caused an antibodies level reduction and the positive changes in thyroid gland, detected by ultrasonography.

Conclusions: It is preferable to apply the complex of peptides of thyroid and pineal glands, as part of complex treatment as well as for prevention of diseases in middle and senior age. The existing conventional treatment regimens of autoimmune thyroiditis require the inclusion of these high-performance schemes, physiological peptide preparations targeted action aimed at increasing the reserve capacity of the organs and tissues involved in the pathological process.

## DEVELOPMENT OF CARING MODEL FOR ELDERLY PERSONS WITH CHRONIC ILLNESS BY VOLUNTEERS IN COMMUNITY

N. Suwankruhasn, Medical Nursing, Chiang Mai University, Chiang Mai, Thailand

Elderly person with chronic illness need continuity and long term care. Some elderly persons live alone or with family members who cannot care them. Thus, they need help from others. People in a community are a group of care provider for elderly person.

The study aimed to develop the caring model for elderly person with chronic illness by volunteers in the community, Nong Hoi village housing, Muang district, Chiang Mai.

This research and development consisted of 5 processes: 1) surveyed and analyzed the current situation, problem and need. 2) designed the caring model for elderly person with chronic illness (draft version). 3) trial of the model 4) evaluated and improved the model, and 5) distributed. The study population included 24 elderly who lived alone or family members need caring help, 264 elderly with self- help or less dependence, and 17 caregiving volunteers.

The research finding revealed that the caring model for elderly person with chronic illness by caregiving volunteers covered health and social welfare (allowance elderly, disability living allowance, and environment and safety). Elderly were divided into 2 groups: the first group was independence/less dependence; and the second group was lack of self-help/ high dependence. The first group received health assessment and participated in health promotion projects in which caring volunteers were developed to write a proposal for funding from other agencies. The second group received home visit, health assessment, and necessary help by caring volunteers and health care team from the municipal hospital. In a case with health problem would be referred to the municipal hospital, municipal service for older person, or Chiang Mai Provincial Social Development Human Security Office.

## DETERMINANTS OF HIGH SELF-CONFIDENCE IN DIABETES MANAGEMENT AMONG OLDER DIABETES PATIENTS

S. Lee<sup>2</sup>, D. Lee<sup>1</sup>, S. Choun<sup>1</sup>, 1. School of Social & Behavioral Health Sciences, Oregon State University, Corvallis, Oregon, 2. The Roy J. and Lucille A. Carver College of Medicine at University of Iowa, Iowa City, Iowa

Self-confidence in diabetes management is important in initiating and maintaining diabetes self-care behaviors, such as healthy diet, being physically active, monitoring blood sugar, medication compliance, good problem solving skills, risk-reduction behaviors, and healthy coping skills. Self-confidence represents that patients are capable and effective in achieving desired health outcomes. Patient's level of confidence in diabetes self-care is associated with patient's perception on the degree of problems present in diabetes management, difficulties in self-care, understanding of self-care methods, self-rated health, and social support. We used data from the Health and Retirement Study (HRS) to explore the determinants of self-confidence in diabetes management among older diabetes patients. The sample consist of 1,888 diabetic patients (mean age = 70 years, SD = 8.8, age range = 50 - 96, women = 52.4%) who