# CHAPTER FIVE CONCLUSION, DISCUSSION AND RECOMMENDATIONS

This chapter presents (1) a summary of the study, (2) a summary of the findings, (3) discussions of results, (4) conclusions, and (5) recommendations for further research.

# 5.1 SUMMARY OF THE STUDY

# 5.1.1 Objectives of the study

The objectives of this study are to investigate the knowledge and awareness of diabetes among Thai office workers in Bangkok and to obtain the respondents' suggestions on how to improve the diabetic education program.

# 5.1.2 Subjects, Material, and Procedures

This survey is a cross-sectional study that used the accidental sampling method to select the sample. The subjects of this study are 124 Thai office workers who work in Bangkok. The instrument used for gathering the data was a questionnaire which was divided into 4 parts; Demographic information, General knowledge of diabetes, Awareness of diabetes, and Suggestions about diabetic education program. The questionnaires were distributed from the 5<sup>th</sup> until the 28<sup>th</sup> of January 2009. Then the data were processed by SPSS program version 16.0 and were presented with descriptive statistics; Frequency, Percentage, Mean, and Standard Deviation.

# 5.2 SUMMARY OF THE FINDINGS

The results of the study can be summarized as follows:

## 5.2.1 Demographic Information of the Respondents

Of all 124 subjects, 54.84% were female and 45.16% were male. The age of the subjects was varied, ranging from 20 to over 60, but most were 31-40 years old. The majority of the respondents held a Bachelor's degree and worked in sales/ marketing department. For income, about 40% of the respondents had an average monthly income of between 10,001-20,000 baht. Three quarters of them had had their

blood sugar tested. Nearly 70% out of these three quarters had normal blood sugar while a few of them had high blood sugar.

#### 5.2.2 General Knowledge of Diabetes

On average, most of the respondents had a moderate knowledge level of diabetes in 4 aspects. They knew causes and risk factors of diabetes. Almost all of the respondents knew about the diagnosis and symptoms of diabetes. More than half of them could answer about chronic complications of diabetes correctly. Besides, most respondents knew how to practice in order to be safe from this disease. However, some of them still lacked diabetes knowledge in some points. For example, they did not know eating before having a blood test has effects on the blood sugar level and the eating of sweet fruits such as watermelon and ripe papaya should be limited. Moreover, they had a misunderstanding that diabetes can be completely cured.

## 5.2.3 Awareness of Diabetes

Most of the respondents were aware of the seriousness of diabetes; nearly 80% answered that diabetes affects their quality of life and 92.74% agree that diabetes complications can cause death. Moreover, the majority of the respondents were aware that diabetes preventive action benefited their health; they thought blood sugar control helps prevent or slow down diabetes complications and regular exercises help prevent the onset of diabetes. However, less than half of them were aware that they are at risk of developing diabetes and felt that they knew enough about it. Only one third disagreed it is hard to control the blood sugar level to be at a normal range.

## 5.2.4 Suggestions about Diabetic Education Program

Nearly all respondents thought nowadays educating people with diabetes was not sufficient enough, so there should be more information provided for them. It was found out that the three most wanted channels to learn more about diabetes in the respondents' opinion were TV, magazine/ journal/ newspaper and radio, respectively. The result also showed that the first three diabetes topics that the

respondents wanted to know most were causes and risk factors, prevention and practice, and sign and symptoms, respectively.

## 5.3 **DISCUSSION**

This section concerns the discussion of the knowledge and awareness of diabetes among Thai office workers in Bangkok.

5.3.1 Since most of the respondents graduated from Bachelor's degree level, the researcher expect this may lead the respondents to have a higher level of diabetes knowledge. The results from the study also support this idea. Most of the respondents who held Bachelor's degree had a score of 12.57 on average while lower than Bachelor's degree had a lower score and higher than Bachelor's degree had a higher score.

5.3.2 Although the majority of the respondents have moderate knowledge about diabetes, most of them want more diabetes knowledge, especially causes and risk factors, prevention and practice, and sign and symptoms of diabetes. For this reason, health care professionals should pay more attention to these aspects of diabetes knowledge and make diabetes education to people a priority. This information also implies that education programs should focus on the prevention from diabetes rather than curing from it.

5.3.2 It comes as a surprise to the researcher that half of the respondents are unable to recognize symptoms of diabetes. Besides, almost all of them do not know that eating before having a blood test has an effect on the blood sugar level. These might be the major barrier to early detection and diagnosis of diabetes.

5.3.3 The results show that almost half of the respondents have misconceptions regarding the consumption of sweet foods and sugar as the usual cause of diabetes. This result also goes along with the study of Tessaro, Smith, and Rye (2005) who found out that participants believed diabetes was the disease most likely developed from eating too much sugar and laziness. Consequently, it is necessary that health care professionals have to educate the public with accurate and useful information so that people will use this information to protect themselves form diabetes.

5.3.4 The outcome from the questionnaire shows that the respondents aged 20-30, who are the youngest, have the lowest knowledge score compared with other age ranges. In contrast more than 60 year-old-respondents have the highest score. The reason might be that the older are concerned more about their health while the younger may focus more about their work. It might be that the older perceive they are risk of not only diabetes but also other diseases, so they try to find more information about the diseases so that they can better take care themselves.

5.3.4 Findings from this study indicate that most of the respondents are aware of diabetes danger, but they are not aware of the risks of diabetes. This may be because most of people still believe the risk groups of diabetes are old age people or people who are overweight. Thus, increasing awareness of this aspect is a must because it will help alleviate the devastating effects of diabetes.

5.3.5 In the respondents' opinion, the three most effective media to learn more about diabetes are TV, magazine/ journal/ newspaper and radio. Therefore, government and health care providers should support or improve the information services in these three categories.

# 5.4 CONCLUSIONS

The following conclusion can be drawn from the discussion above:

5.4.1 From the research findings, Thai office workers in Bangkok had moderate knowledge about diabetes. However, they had misconceptions about some points.

5.4.2 Most of the respondents were aware how severe diabetes was and how diabetes preventive action benefited their health. However, they still lacked the awareness of a chance to develop the disease.

5.4.3 Several findings of this study pointed to the need for more public health education for primary prevention of diabetes. Therefore, government and health care professionals should cooperate to improve diabetic education programs so that the public is properly educated about diabetes.

# 5.5 RECOMMENDATIONS FOR FURTHER RESEARCH

Based on the findings and conclusions of this study, the following recommendations are made for future research.

5.5.1 Due to the limitation of time, this research studied 124 office workers which is a small sample size. The results may not represent the whole; therefore, future studies should be done with a broader target group.

5.5.2 Future study can be conducted to study other factors affecting the knowledge and awareness of diabetes mellitus such as gender, age, education level, family history, and marital status.

5.5.3 This paper focused on only the knowledge and awareness of diabetes mellitus, so further research should study whether or not the level of knowledge and awareness of diabetes have effects on diabetes risk behaviors.