Health-Related Quality of Life and Its Related Factors in Patients with Diabetes
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Background
Diabetes mellitus (DM) is a chronic disease that requires long-term medical attention to limit the development of its devastating complications and to manage them when they do occur. The health threat of DM, mainly results from poor glycemic control and complications. DM affects individuals not only the physical, the psychological and social aspects, but also the quality of life. DM also imposes a heavy burden on health care system. The International Diabetes Federation predicts that the number of people living with diabetes will rise from 387 million in 2014 to 552 million by 2030. The number of people with type 2 diabetes is increasing in every country. Recent health care outcomes of DM do not only focus on “mortality” or "morbidity", emphasis has been geared to promote comfortable life and quality of life. American Diabetes Association (2008) has advocated that health should understand relationships between indicators of DM control and quality of life.

Purpose and Specific Aims of the Study
The purpose of this study was to explore the quality of life and its related factors in individuals with DM.

Method
STUDY DESIGN
A cross-sectional correlational study design was used.

SAMPLING METHOD
Using a purposive sampling approach
- Adult individuals with DM who received diabetes care at OPD of a medical center in central Taiwan area
- Including criteria: Able to communicate in either Taiwanese or Mandarin Chinese
- Excluding criteria: Individuals with mental illness or organic brain disease

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Study Instrument
Participants were interviewed using:
- The Taiwan-version Diabetes-39 questionnaire to assess their health-related quality of life.
- Demographic data were also collected.
- In addition, chart reviews were conducted to collect other disease-related information.

Data Collection and analysis:
After approval was obtained from a hospital institutional review board for the protection of human subjects, the researcher began to recruit participants.
- Participants were interviewed by the researcher on one-on-one basis to collect data.
- Chart reviews were conducted to collect other disease-related information.
- Both descriptive and inferential statistics were used to analyze data.
- SPSS version 19.0 for windows was used to analyze data.

Results
Participants’ Profile:

- Relationship between Demographic Characteristic and Quality of Life
  - Age, sex, educational level, marriage status, living arrangement, occupational status, income, use of alcohol and use of tobacco are related to the participants’ quality of life.
  - Treatment modalities play a role in DM-related quality of life, in terms of:
    - vitality and activity (F(1) = 15.31, p<.001)
    - Diabetes control (F(1) = 55.55, p<.001)
    - Anxiety and worry (F(1) = 14.38, p<.001)
    - Social and peer pressure (F(1) = 31.52, p<.001)

- Relationship between disease profiles and Quality of Life
  - Stages of chronic renal disease play a role in DM-related quality of life, in terms of:
    - vitality and activity (F(1) = 11.6, p<.001)
    - Social and peer pressure (F(1) = 4.48, p<.005)
    - Sexual function (F(1) = 2.77, p = .042)

- Complications and comorbidity also play roles in DM-related quality of life, in terms of (p <.001)
  - Anxiety and worry (F(1) = 14.38, p<.001)
  - Social and peer pressure (F(1) = 31.52, p<.001)
  - Sexual function (F(1) = 2.77, p = .042)

- Predictors of Quality of Life
  - 73% of variance of vitality and activity is explained by: treatment modality, time being diagnosed with DM, HbA1C, number of complications and comorbidity
  - 74.3% of variance of diabetes control is explained by: treatment modality, time being diagnosed with DM, HbA1C, use of alcohol.
  - 43.3% of variance of anxiety and worry is explained by: treatment modality, time being diagnosed with DM, HbA1C, use of alcohol, complications and comorbidity.
  - 50.3% of variance of social and peer pressure is explained by: treatment modality, time being diagnosed with DM, HbA1C, stage of CKD, and complications.
  - 29.3% of variance of sexual function is explained by: sex, use of alcohol and use of tobacco.

Conclusion
Diabetes mellitus is a chronic disease that requires long-term medical attention to limit the development of its devastating complications and to manage them when they do occur.
- The results of this study can provide health professionals to learn more about individuals with DM, their health-related quality of life and its related factors.
- Healthcare professionals may base on these understanding to provide holistic care plan to individuals with DM.