

Factors associated with health literacy among type 2 diabetes mellitus patients attending a government health clinic, 2016

ABSTRACT

Background: Despite the numerous health education programmes provided to the type 2 diabetes patients worldwide, the outcome of the diabetic management remains a challenge globally. Health literacy plays an important role in determining the outcomes from the diabetes management.

Materials and Methods: This study was aimed to determine the level of health literacy and its associated factors among type 2 diabetes mellitus patients attending a government health clinic. This study also aimed to determine the association between the associated factors, such as sociodemographic, socioeconomic characteristics, type of treatment, diabetes duration, and knowledge on diabetes and the level of health literacy as well as the predictors of the level of health literacy. This was a cross-sectional study that was conducted from 1st February 2016 to 30th July 2016. A total of 360 participants were randomly selected from a government health clinic through a systematic random sampling method. A validated, self-administered questionnaire incorporating sociodemographic characteristics, socioeconomic characteristics, history of type 2 diabetes, diabetes knowledge and health literacy level was used in this study. Data was analysed using IBM Statistical Package for Social Science Version 22.0. Chi square test, Fisher's Exact test and simple logistic regression were used to measure the association between the associated factors and health literacy level. Multiple logistic regression analysis was used to analyse the predictors influencing health literacy level among type 2 diabetes mellitus patients.

Result: The response rate was 80%. Majority of the respondents have limited health literacy level (85.8%). There were significant association between ethnic group and health literacy level ($\chi^2=6.317$, $P=0.042$), level of education and health literacy level ($\chi^2=6.304$, $P=0.043$) and diabetes knowledge score and health literacy level [Odds Ratio (OR)=1.254, 95% Confidence Interval (CI) (1.063,1.479)]. Finally, the significant predictors for adequate health literacy level were the Chinese ethnic group [Adjusted OR (AOR)=4.441, 95% CI (1.472,13.392)] and diabetes knowledge score [AOR=1.238, 95% CI (1.031,1.488)].

Conclusion: In conclusion, level of health literacy among type 2 diabetes mellitus patients was significantly associated with the ethnic group, level of education and diabetes knowledge score. It can also be concluded that Chinese ethnic group and diabetes knowledge score were the significant predictors for adequate health literacy level among type 2 diabetes mellitus patients.

Keyword: Health literacy; Type 2 diabetes; Health literacy factors; Diabetes education