

# 論 文 内 容 要 旨

Diabetes knowledge, health beliefs, and health  
behaviour among type 2 diabetes patients in rural  
area Indonesia – Qualitative and quantitative  
studies

(インドネシアの農村地域における2型糖尿病患者の  
糖尿病知識、健康信念、および保健行動 – 定性的お  
よび定量的研究)

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The author designed two studies related to diabetes knowledge, health beliefs and health behaviour among type 2 diabetes patients in rural areas, Indonesia. The rural areas that were targeted in this study were rural areas in Bali because diabetes becomes the second deadliest disease in Bali. The aims of the first study was to explore diabetes knowledge, health beliefs, and behaviours among type 2 diabetes patients in rural Indonesia using the theoretical framework of the Health Belief Model. The first study used qualitative method involving semi-structured focus group discussion among twenty of type 2 diabetes patients (mean age 49.9 years old, range 33–58). Nine (45%) participants were graduates from elementary school, 9 (45%) were those from high school, 2 (10%) were those from junior high school, and all of them were working (45% of them were sellers). Mean age when the participants got the diabetes diagnosis was  $49.6 \pm 6.5$  years old. Mean of random blood glucose level in November 2016 was  $184.3 \pm 75.7$  (mg/dL). About 60% of the participants did not have a family member suffering from diabetes and 75% participants had no history of non-communicable disease. There were three themes formulated in this study: the poor diabetes knowledge, diabetes perceived as a life burden, and the factors affecting self-efficacy in practicing healthy lifestyle. The results showed that there were poor diabetes knowledge and health beliefs among type 2 diabetes patients in rural Indonesia. The traditional indigenous beliefs about diabetes in rural area, i.e., burden, and the lack of internal intention in patients to practice health behaviours are factors that exacerbate participants' health beliefs. These findings also showed that the limited knowledge on diabetes and poor health beliefs are both related to low level of health behaviours of type 2 diabetes patients in rural area. The second study was intended to determine whether demographic characteristics, clinical and lifestyle factors, diabetes knowledge, and the extended health belief model could predict the healthy lifestyle behaviours of type 2 diabetes patients in

rural Indonesia. A sample of 203 type 2 diabetes patients representing a cross-section of the population were recruited from community health centres in the rural areas of Bali province. The sample was taken using convenience sampling method. The data were collected through questionnaires. Descriptive statistics and a hierarchical regression test were employed. Demographic characteristics, clinical and lifestyle factors, diabetes knowledge, and the extended health belief model accounted for 71.9% of the variance in healthy lifestyle behaviours. The significant demographic factors ( $p < 0.05$ ) were age, education level, employment status, and traditional beliefs. The significant clinical and lifestyle factors ( $p < 0.05$ ) were alcohol use, diabetic medicine, and duration of symptoms. From the extended health belief model, the significant ( $p < 0.05$ ) factors were perceived severity, susceptibility, barriers, family support, bonding social capital, and chance locus of control. Against expectations, diabetic medicine and perceived severity had significant negative correlations with healthy lifestyle behaviours ( $p < 0.05$ ). This was attributable to low levels of education and misinformation about diabetes. Based on the results of the two studies, it can be suggested that efforts to promote healthy behaviours in type 2 diabetes patients should not be limited to educating type 2 diabetes patients about diabetes. Efforts should include the consideration of their levels of education, health beliefs, the culture that the patients belong to, and the support of family and people in the environment around them to reduce the risk of diabetes complications.