

## Effectiveness of Health Literacy through Transformative Learning of Glycemic Control in Diabetic Adults

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### Abstract

This research used a mixed methods intervention design. The research aimed to: 1) study the perspectives of diabetic adults and 2) investigate the effectiveness of health literacy through transformative learning of glycemic control. In study 1, through qualitative research, the perspectives of 13 diabetic adults in Bangkok, Thailand, were examined using in-depth interviews. The findings were divided into three themes that reflected the beliefs of the patients: 1) the serious nature of the disease; 2) that made life difficult; and 3) that the glycemic control relied on patients' sense of self-reliance and efficacy. The perspectives towards health literacy consisted of two themes: 1) information must be analyzed and evaluated before usage; and 2) hierarchical relationship influences the communication between providers and patients. The study 2 was an experimental research, in which consisted of 40 diabetic adults, divided equally into 2 groups; the experimental (20 participants) and control (20 participants) group. The instrument used were the glycemic control questionnaire, and the measurement of glycosylated hemoglobin (A1C). The intervention consisted of 4 sessions for 4 weeks, for two hours per session, and the final session was visiting their homes. The ANCOVA and repeated measures were applied for data analysis. The results revealed that: 1) the experimental group had more glycemic control and less A1C than the control group ( $p < 0.01$ ); and 2) the experiment group had changing and maintaining in glycemic control and A1C ( $p < 0.01$ ). The findings of this study could be useful for healthcare providers to develop the glycemic controlling program based on the patients' contexts.