**P-004**

# Education Strategy Based on the Stages of Change to Promote Self-Management in Adults with Type 2 Diabetes Mellitus Receiving Blood Glucose-Lowering Drugs: A Mixed-Methods Study

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**Aim(s):** To investigate the barriers and facilitators associated with blood glucose-lowering drugs (BGLDs) and to assess the effect of a Stages of Change (SOC) education program on glycemic control and outcome.

**Method(s):** This study used a mixed-methods design, with 70 adults with type 2 diabetes mellitus (T2DM) divided into two groups termed "Informed" and "Uninformed." During phase I, focus group sessions were used to ascertain the barriers and facilitators to taking BGLDs medication. Phase II was conducted as a randomized controlled trial (RCT) in which the informed group received 4 sessions of BGLDs education-based SOC training. The group classified as uninformed received no education at all. Both groups were followed for 6 months, and baseline, 4 weeks, and 6-month assessments were conducted.

**Result(s):** Phase I enrolled 22 participants. The themes of knowledge, alternative treatment, planning, medication satisfaction, and diabetes-related beliefs served as facilitators. Health problems, socioeconomic status, and inadequate professional health care were identified as inhibitory themes. Metformin was the most frequently prescribed BGLD for this group. After adjusting for baseline, post-, and follow-up intervention, fasting plasma glucose (FPG) levels were decreased ($P=0.001$ and $P=0.049$, respectively). Additionally, 2-hour plasma glucose (2-hPG) decreased significantly post-intervention ($P=0.000$). The Homeostasis Model Assessment of Insulin Resistance (HOMA-IR) revealed a significant decrease in insulin resistance during the follow-up period after adjusting for baseline differences ($P=0.011$).

**Conclusion(s):** Training based on SOC has beneficial effects on outcomes in adults with T2DM. Key word: Diabetes Mellitus, BGLDs, HOMA-IR, Self-Management, SOC.

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