

# **Efektivitas Program Edukasi Nutrisi Berbasis Budaya Terhadap Nilai Klinis Dan Perilaku Manajemen Diri Pada Penderita Diabetes Mellitus Tipe 2 Di Kota Lhokseumawe**

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## **Abstrak**

Diabetes Mellitus tipe 2 merupakan masalah kesehatan global dengan prevalensi meningkat di Indonesia, termasuk Kota Lhokseumawe (2,03%). Edukasi nutrisi berbasis budaya diharapkan dapat meningkatkan nilai klinis dan manajemen diri penderita.

Penelitian *quasi-experimental* dengan desain *control group* melibatkan 128 penderita DM tipe 2 di Kota Lhokseumawe yang dibagi menjadi kelompok intervensi dan kontrol (n=64 masing-masing). Intervensi berupa program edukasi nutrisi berbasis budaya Islami selama enam bulan. Pengukuran dilakukan melalui *pre-test*, *post-test 1*, dan *post-test 2* terhadap kadar gula darah, *HbA1c*, tekanan darah, *profil lipid*, BMI, dan *self-management* menggunakan DSMI-35. Analisis data menggunakan uji *Wilcoxon Signed Rank Test* dan *Mann Whitney U Test*.

Kelompok intervensi menunjukkan perbaikan signifikan ( $p < 0,05$ ) pada seluruh parameter klinis dan perilaku manajemen diri pasca-intervensi, sedangkan kelompok kontrol tidak mengalami perubahan bermakna. Perbandingan antar-kelompok menunjukkan perbedaan signifikan pada *Post Test 1* dan *2*.

Program edukasi nutrisi berbasis budaya terbukti efektif meningkatkan nilai klinis dan *self-management* penderita DM tipe 2. Pendekatan budaya lokal meningkatkan penerimaan dan kepatuhan pasien, sehingga direkomendasikan untuk diintegrasikan dalam pelayanan kesehatan primer.

Kata kunci: edukasi nutrisi, budaya, diabetes mellitus tipe 2, nilai klinis, manajemen diri

## ***Effectiveness of a Culture-Based Nutrition Education Intervention on Clinical Parameters and Diabetes Self-Management in Lhokseumawe***

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### ***Abstract***

*Type 2 diabetes mellitus (T2DM) is a growing public health concern in Indonesia, with Lhokseumawe reporting a 2.03% prevalence. Conventional nutrition education often neglects cultural and religious contexts, limiting patient adherence. This study evaluated a culturally adapted nutrition education program integrating Islamic principles on clinical outcomes and self-management in T2DM patients.*

*A quasi-experimental design with a control group enrolled 128 T2DM patients, allocated into intervention (n=64) and control (n=64) groups. The intervention group received a 6-month culturally tailored nutrition program. Clinical parameters (fasting blood glucose, HbA1c, blood pressure, BMI, cholesterol, macronutrient intake) and self-management behavior (DSMI-35) were measured at baseline, immediately post-intervention, and at 1-month follow-up. Data were analyzed using Wilcoxon Signed Rank and Mann-Whitney U tests.*

*The intervention group exhibited significant improvements across all clinical parameters and self-management scores ( $p < 0.001$ ), while the control group showed no significant changes ( $p > 0.05$ ). Between-group comparisons confirmed sustained significant differences at both post-intervention assessments ( $p < 0.05$ ).*

*Culturally adapted nutrition education effectively improves glycemic control, cardiovascular risk markers, and diabetes self-management. Integrating Islamic values and local dietary norms enhances intervention acceptability and behavioral sustainability, supporting its routine integration into primary diabetes care.*

**Keywords:** culturally adapted education; nutrition intervention; type 2 diabetes; clinical outcomes; self-management; Islamic health principles