



Exploring Non-attendance of Pre-insulin Classes: An Implication for Our Service Strategies

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Introduction

Pre-insulin classes are commonly used in public sector helping type 2 diabetes mellitus (T2DM) patients required starting insulin, by considering staffing and demands. Non-attendances appeared throughout classes have not yet been examined. This study identified patients' factors related to attendance.

Method

Design: Retrospective review of data retrieved from electronic database

Subjects: T2DM patients referred to the pre-insulin classes

Setting: Primary Healthcare Unit in Public Sector

Study Period: 1 Jan 2015 - 31 Aug 2020

Outcomes: Factors associated with attendance, e.g. age, sex, smoking status, alcohol consumption, socioeconomic status, occupation, ethnicity, duration of diabetes, body mass index, comorbidities

Analysis: Independent two samples t-test and exact chi-square test were used to examine univariate associations. The independent contribution of risk factors to class attendance was determined by stepwise logistic regression. Adjusted odd ratios (ORs) and 95% confident interval (95% CI) were calculated.

Results

- 320 T2DM patients referred to the classes are retained for analysis
- Attendance rate of 79.4% (n=254)

Univariate associations:

- No formal education/primary: 83.4% vs. secondary/tertiary: 73.0%; p=0.029
- Non-smokers/ex-smokers: 80.6% vs. current smokers: 62.9%; p=0.019

Multivariable associations:

- Secondary/tertiary education (adjusted OR=0.542, 95% CI=0.310, 0.947; p=0.032)
- Current smokers (adjusted OR=0.439, 95% CI=0.205, 0.938; p=0.033)

Who are **more likely to attend the pre-insulin classes?**

↑ Attendance if
☑ No formal or primary education
☑ Non-smokers or ex-smokers

Conclusions

- Non-attendance behaviour serve as a marker for identifying patients should be served with alternative care models.
- The findings of this study suggest strategies stratified with education level and smoking status for improving attendance of the pre-insulin class so as to improve the insulin initiation rate.