

## THE 4TH MULAWARMAN INTERNATIONAL CONFERENCE ON TROPICAL PUBLIC HEALTH (MICTOPH) 2025



## **ABSTRACT**

**Title of Abstract** : Effectiveness of Video and Presentation-Based Education on Type 2

Diabetes Mellitus among Generation Z in Samarinda

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Background: Type 2 diabetes mellitus (T2DM) is a chronic metabolic disease whose prevalence continues to increase globally, including in Indonesia. Health education plays an important role in increasing knowledge and preventive behaviors for T2DM. Media videos and live presentations are considered capable of strengthening public understanding, particularly among young people who are familiar with digital technology.

Objective: To determine the effect of education using a combination of videos and presentations on increasing public knowledge about type 2 diabetes mellitus.

Research Methods/ Implementation Methods: This research uses a pre-experimental one-group pretest-posttest design. A total of 100 Generation Z respondents (born 1997–2013) with non-health backgrounds in Samarinda were selected through purposive sampling. The intervention consisted of a combined educational approach using videos and live presentations about type 2 diabetes. The research instrument was a validated and reliable knowledge questionnaire. Normality testing using Kolmogorov–Smirnov showed the data were not normally distributed (p < 0.05), so the analysis of knowledge score differences was performed using the Wilcoxon Signed-Rank Test.

Results: The results showed p < 0.05, which means there was a significant difference between the pretest and posttest scores. These results indicate that a combination of video and presentation education is effective in increasing respondents' knowledge about DMT2.

Conclusion/Lesson Learned: Health education using a combination of video media and presentations has been proven to significantly increase public knowledge about type 2 diabetes mellitus. This multimodal approach can be an effective strategy in digital health promotion, especially for young people.

Keyword: type 2 diabetes mellitus; health education; educational videos; knowledge; Generation Z