

## Impact of the anti-hypertensive diets virtual education towards knowledge, attitude, practice, and reduction of blood pressure during covid-19 pandemic

Andrianto A. ; Ardiana M. ; Yutha A. ; Khrisna BPD ; Nugraha RA. ; Putra TS. ; Shahab AR. ; Andrianto H. ; Kikuko IH. ; Puspitasari AN. ; Hajjrin MR.

Airlangga University, Surabaya, Indonesia

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**Background.** One of the efforts to reduce hypertension rates in the community is through dietary changes that refer to the Dietary Approach to Stop Hypertension guidelines or abbreviated as DASH. However, in the COVID-19 pandemic, there is a significant obstacle regarding the most effective way to transfer knowledge, skill, and attitude towards society.

**Aims.** Department of Cardiology and Vascular Medicine created a virtual education series about dietary guideline that refers to DASH by adapting the local wisdom of the Surabaya community. We aimed to evaluate the impact of Airlangga Comprehensive Anti-Hypertensive Diets Virtual Education Series towards knowledge, attitude, practice, and reduction of blood pressure in the primary care setting during COVID-19 pandemic.

**Methods.** This type of online action research is quantitative with a quasi-experimental design that designs using one group pretest-posttest, when this study was conducted in October-December 2020. The population in this study were all patients with hypertension who were treated in Mojo primary health care setting. A purposive sampling technique were done to receive 110 participants using online questionnaire.

**Results.** A total of 110 participants were included in the analysis, 55 in the intervention group and 55 in the control group. Following the Airlangga Comprehensive Anti-Hypertensive Diets Virtual Education Series implementation, the only parameter that showed significant improvement were knowledge and attitude ( $p < 0.001$ ). There is no significant change in the skill parameters ( $p = 0.131$ ) and blood pressure parameters ( $p = 0.433$ ).

**Conclusion.** Airlangga Comprehensive Anti-Hypertensive Diets Virtual Education Series implementation in our study population seems to be effective to improve knowledge and attitude of participants, however, this program seems to be ineffective to improve skill and blood pressure reduction in participants. Future study with longer durations and more comprehensive programme needs to be done to scrutinize the clinical impact of this program nationwide.