

## Documents

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**Effectiveness of an educational module in improving knowledge, awareness and perception among pregnant women regarding the safe use of prenatal ultrasound**

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**Abstract**

**Background:** Lack of public understanding, perception and awareness of the biological effects of prenatal ultrasound has led to the non-medical use of ultrasound. An educational programme is required to enlighten pregnant women and the public regarding prenatal ultrasound safety. **Objective:** To evaluate the effectiveness of educational modules (video and brochure) in improving knowledge, awareness and perception (KAP) among pregnant women regarding prenatal ultrasound safety. **Methods:** This is a quasi-experimental study with a pre-and post-test design. This study recruited 51 pregnant women as respondents from the Obstetrics and Gynaecology clinic (O&G) of Hospital Canselor Tuanku Muhriz (HCTM). The first phase of the study was conducted by distributing a set of closed-ended questionnaires with multiple choice and Likert scale answers to assess the KAP of pregnant women regarding the safe use of prenatal ultrasound, followed by educational modules where the respondents were allocated into three groups (17 watched a video, 17 received brochure and 17 received combined media). After the intervention, the respondents' KAP were assessed using the same questionnaire. **Results:** The Wilcoxon signed rank test showed that educational modules like video, brochure and combined media had a statistically significant increase in post-test scores over the pre-test scores (video: mean rank = 9.00,  $p < 0.05$ ) (brochure: mean rank = 9.79,  $p < 0.05$ ) and (combined media: mean rank = 10.17,  $p > 0.05$ ). The Kruskal Wallis test indicated that educational video was more effective in improving the KAP of pregnant women than the brochure and combined media (mean rank = 34.62,  $p < 0.05$ ). Among the parameters, the occupation has the strongest positive correlation with the post-test knowledge score in improving the KAP of pregnant women regarding the safe use of prenatal ultrasound. **Conclusion:** The educational video is the most effective approach for enhancing pregnant women's KAP. The educational module on the safety of prenatal ultrasound is thought to dispel myths by providing accurate information to audiences from various backgrounds. © 2022 The Authors

**Author Keywords**

Brochure; Educational module; Prenatal ultrasound; Quasi-experimental study; Video

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