

Do Pregnant Women Fast in Ramadan? – Knowledge & Practice among Mothers in Putrajaya

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ABSTRACT

Introduction: Ramadan fasting is obligatory for healthy adult individuals. Exemption from fasting is permitted for women who are pregnant or breastfeeding. The aim of this study was to determine the level of knowledge, attitude and practice of Ramadan fasting among pregnant women in Putrajaya. **Methods:** It was a cross-sectional study done between May and August 2018 (one month after Ramadan) involving pregnant women in Putrajaya. Self-administered questionnaire with back-to-back translations had been developed and given to the women. It was divided into three parts, involving the attitudes, practice and knowledge of the women with regards to Ramadan fasting and their health. The results were analysed using IBM SPSS Statistics V25.0. The study was approved by the Ethics Committee of Universiti Putra Malaysia (JKEUPM). **Results:** 93 respondents participated and 52 (55.9%) of them were multigravida. 63.9% of the respondents were in their third trimester. 88 women (94.6%) fasted in Ramadan and 20 women fasted the whole months of Ramadan (30 days). Half of those who fasted did experienced adverse effects. Among the effects were weakness (24%), headache and dizziness (33%), and vomiting (13%). Majority of them fasted because they felt it is an obligation to them, and they felt embarrassed if people knew they were not fasting. There was significant association between gestational age and practice of fasting. Those in first trimester were more likely to experience unpleasant effects. **Conclusion:** Most of pregnant women in Putrajaya fasted in Ramadan and knowledge level did not influence the practice of Ramadan fasting.

Application of Z-Score among Reported Normal Cardiac Structure on Foetal Echocardiography Assessment

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ABSTRACT

Introduction: Four chamber view in foetal echocardiography is widely used for structural and functional cardiac abnormalities screening but low detection of these anomalies may reduce its value. **Objectives:** To apply Z-score quantification for detection of foetal cardiac abnormalities among the reported normal foetal echocardiography. **Methods:** In this prospective pilot research 30 normal singleton pregnancies between 19 to 35 weeks of gestation were studied. Two-dimensional foetal echocardiography via standard eye-balling visual assessment was performed to acquire the four-chamber view, parameters assessment, and quantitative analysis of the cardiac dimensions. The Z-score were computed for right and left ventricular (RV and LV), aorta (AO), pulmonary artery (PA) diameters against menstrual age (MA) and femoral diaphysis length (FDL). The obtained Z-scores were then compared to the Z-score normogram reference range; categorizing the data within normal range or out of range. **Results:** In RV vs MA, three subjects with Z-score out of the predicted RV diameter range (10%). For LV vs MA, two subjects' Z-score were out of range (6.7%). For AO vs MA, one subject's Z-score was out of range (3.3%). For PA vs MA, all were within range. Otherwise all cardiac dimensions; RV, LV, AO, PA vs subjects' FDL measurements satisfied the respective predicted diameter range. There was a significant difference between left and right ventricles. There was no significant association between CHD and maternal complications (advanced maternal age, gestational diabetes mellitus, SLE and thyroid), $p > 0.05$. **Conclusions:** FDL is a relatively more reliable cardiac parameter compared to MA while the use of Z-score in foetal echocardiography increases precision of evaluation and quantification for detection of foetal cardiac abnormalities.