Background Knowledge and Attitude of Pregnant Women towards Ultrasound Screening at 20–23 Weeks Gestation

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Background: Prenatal ultrasound screening in the second trimester is widely used in maternal health care. Prenatal diagnosis and prenatal screening are often exposed to several accusations, such as inducing unnecessary anxiety, carrying out a selection and forcing pregnant women into attending ultrasound screening. The aim of this study was to investigate the knowledge and the intention of pregnant women attending the second trimester ultrasound screening.

Patients and Methods: This was a prospective study over a period of two years. Women attending the 20 weeks anomaly scan were given an anonymous questionnaire to evaluate the background knowledge about the anomaly scan and their opinion about prenatal screening. Furthermore the woman were asked to express if they feel forced to attend ultrasound screening and if yes why and by whom. Next to the knowledge and the intention of pregnant women attending the 2nd trimester ultrasound scan, it was further to investigate whether there were significant differences in knowledge regarding maternal age, previous pregnancies, education, religion and nationality.

Results: 600 (96.7 %) of 620 recruited women filled in the questionnaire completely. For the majority (> 80 %) of women it is important to exclude severe fetal anomalies and to secure normal fetal growth. The majority of the women stated that the 20 weeks anomaly scan should be offered to every woman.

Regression analysis showed that there were significant differences in maternal age and education. Women with an age over 31 years and women with higher school education had a better estimation of the right answers regarding the possibilities to detect fetal anomalies by ultrasound. There were no significant differences when comparing knowledge regarding previous pregnancies, religion or nationality.

10 of the 35 (5.8 %) women stating they felt forced to attend the 2nd trimester anomaly scan reported that their physician talked them into the examination, 25 stated they feel obliged to themselves and to the fetus. None of them regretted attending the 2nd trimester anomaly scan afterwards.

There is a statistically significant difference in the estimation of feeling forced to attend 2nd trimester anomaly scan regarding the group of religions. 19.8 % of the women belonging to the religion “Islam” answered they felt forced to attend the scan, and were thus marked off against the others.

Conclusion: The background knowledge of the women was good, but a clear supply of information and a detail counselling would improve the understanding, especially in the group of lower education. Prenatal ultrasound examination is not only essential from a medical point of view for example for important information regarding the status of the fetus, but also has a major impact as a positive psychological factor for pregnant women.

Fig. 1 Estimation (in percentage %) of women what kind of anomalies could be picked up by the 2nd trimester anomaly scan.

Fig. 2 Attitude of feeling forced to attend 2nd trimester anomaly scan with regard to the group of religions.