Are pregnant women adequately equipped for autonomy in first trimester screening?

P. Thain, C. Choi, S. Yeo

Background:
First trimester screening (FTS) is currently offered to many antenatal patients in developed countries around the world. This study aims to assess patients' knowledge of FTS and examine their individual risk perception, risk aversion and views on various pregnancy outcomes to see if these factors in combination affect their decision processes.

Methods:
A cross-sectional study was conducted between March to July 2012 involving 50 patients undergoing FTS at KK Women's and Children's Hospital (KKWCH) in Singapore. A questionnaire was designed to assess knowledge of FTS and explore an individual's risk perception with regards to risk values. Data was collated and analysis done via Excel and SPSS statistical package.

Results:
41 (82%) patients correctly identified that increased maternal age was a risk factor for Down syndrome in pregnancy and 33 (66%) patients could recall KKWCH's cut-off value for high-risk as 1:300. However, knowledge of the risks of invasive diagnostic testing was poor. 11 (22%) patients thought the risk of miscarriage was as high as 10%. Patients also did not possess an adequate understanding of FTS risk values, with 34 (68%) patients having the incorrect impression that a high-risk value of 1:50 equated to the fetus either having Down Syndrome most or all of the time. 17 (34%) women would still be concerned at a risk of 1:500 and 12 (24%) would still be concerned at a risk of 1:1000, with some patients opting for invasive testing even at low-risk values of 1:500 and 1:1000 if given a choice.

Conclusion:
This study demonstrates the diversity of pregnant women's risk perception, risk aversion and participation in decision processes when there are two different values in competition. This may be due to different degrees of risk aversion and differing acceptability of various pregnancy outcomes. The study also highlights that our women are currently not well equipped enough in their knowledge and understanding of risk values to make important decisions regarding FTS independently. More needs to be done in the form of educating our population to address and bridge these gaps before a patient can truly exercise her autonomy to make informed decisions for her own pregnancy.