AB147. Treatment-focused genetic testing (TFGT)—is it too soon for Malaysia?

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Background and objective: The knowledge of a woman’s BRCA mutation status around the time of breast cancer diagnosis can be used to guide surgical treatment and preventative options for women. This concept, known as treatment-focused genetic testing (TFGT), has been previously reported to be acceptable in a population of Australian women. However, little is known of the acceptability of TFGT to women with breast cancer in Malaysia. The fact that Malaysia is a multi-cultural and religious country poses challenges for the implementation of BRCA genetic testing into clinical practice. Despite this, the benefits in terms of risk management options and the potential reduction in incidence and mortality of breast cancer that may follow the introduction of TFGT in Malaysia are considerable.

Methods: A qualitative study was performed with 20 Malaysian women who attended the Breast Clinic at University Malaya Medical Centre (UMMC). A modified semi-structured interview was used to explore their hypothetical views on TFGT (as if they were being offered the testing if it was available in Malaysia). All interviews were audio-recorded, transcribed and analysed for concordance by three independent coders. Thematic analysis was facilitated by NVivo 10.0 software (QSR International).

Results: Major challenges to implementing TFGT in Malaysia were identified including limited knowledge of health and the genetics of breast cancer, cultural aspects, attitudes towards risk-reducing surgery and the cost of genetic testing. Most participants had difficulty understanding the concept of TFGT and misunderstood the role of genetic testing in breast cancer treatment. Risk reducing mastectomy was perceived to be too extreme, with significant concerns raised about body image. Social stigmatization about a breast cancer diagnosis and being a BRCA mutation carrier, along with the high cost of genetic testing were other identified barriers/challenges to TFGT implementation in Malaysia. Participants preferred face-to-face discussion with their treating doctor rather than written materials, and information regarding TFGT soon after a breast cancer diagnosis was felt to be too much for most participants to receive at that time.

Conclusions: The lack of understanding of genetic testing and poor health literacy are barriers to the introduction of TFGT in Malaysia. Further education in the role of genetics in breast health is essential but there is also a need to consider cultural influences before TFGT implementation in Malaysia. This study provides important insights into the challenges to breast healthcare and cancer genetic counseling in Malaysia.

Keywords: Attitudes; BRCA genetic testing; breast cancer; Malaysia; treatment-focused genetic testing