Breast screening controversy and the 'mammography wars'—two sides to every story

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To the Editor—Whilst the emphasis on shared decision making in breast screening of Sitt et al[1] is warmly welcomed, one struggles to visualise how this can be promoted when their overview could arguably be condensed into three major take-home messages: (1) any study critical of screening is 'controversial'; (2) risks of screening are overstated; and (3) harms of not screening are overestimated.

The "mammography wars" are predicated by the multiple ways one may analyse mammography screening studies. Estimates of the harms versus benefit "balance sheet" vary wildly depending on the approach utilised (Table).[2,3] Furthermore, estimates of overdiagnosis rates can range from 0% to 54%,[4] dependent on whether studies are based on modelling or cohort observation, which denominator is used, and what adjustments are made (themselves sometimes debated). Essentially, the body of evidence can be "tortured" to give almost any answer you desire. Surely no other topic in medicine can show so many ways to slice the same cake?

The most ardent supporter and passionate dissident can agree that breast screening is imperfect—arguably favourable to suppressing any component of the debate is providing a balanced view. This does not need to constitute a conciliatory back-of-the-envelope calculation—this 'third way' could manifest as the (importantly) independent United Kingdom panel report[5] which calculated that screening 233 women for 20 years can prevent one death, but three women will be overdiagnosed and overtreated.

Only when Hong Kongers are fully informed of the potential benefits and harms can they make truly informed choices.

Declaration

The author has no conflicts of interest to declare. The author had full access to the data, contributed to the study, approved the final version for publication, and takes responsibility for its accuracy and integrity.

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TABLE. Collection of recent studies of varying methodologies and resulting estimation of benefits and harms of breast screening

Study	Gøtzsche et al[2]		Paci et al[3]		Independent United Kingdom Panel[5]	
Study type	Cochrane systematic review and meta-analysis of randomised controlled trials		Summary of literature reviews (mortality trend studies, incidence-based mortality studies, case-control studies; observational studies)		Meta-analysis of randomised controlled trials	
Breast cancer mortality reduction (risk ratio, 95% confidence interval)	7 Trials	0.81 (0.74-0.87)	Incidence-based mortality studies		11 Trials	0.80 (0.73-0.89)
	3 "Adequately randomised" trials	0.90 (0.79-1.02)	Invited women	0.75 (0.69-0.81)		
	4 "Suboptimally randomised" trials	0.75 (0.67-0.83)	Screened women	0.62 (0.56-0.69)		
			Case-control studies			
			Invited women	0.69 (0.57-0.83)		
			Adjusted	0.52 (0.42-0.65)		
Benefits vs harms calculation offered	Screen 2000 women for 20 years		Screen 1000 women aged 50-51 to 68-69 (follow-up until age 79) years		Screen 10 000 women aged 50 for 20 years	
	Breast cancer deaths prevented	1	Breast cancer deaths prevented	7-9	Breast cancer deaths prevented	43
	Overdiagnosed	10	Overdiagnosed	4	Overdiagnosed	129
			Recall with non-invasive assessment	170		
			Recall with invasive assessment	30		

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