



Letter to the Editor

Mammography screening causes anxiety in women

*To the Editor,*

Breast cancer is the most frequently diagnosed cancer affecting females in the world, including Taiwan, and is the leading cause of cancer-related mortality in women.¹ Because of the sheer magnitude of this disease, its psychosocial impact and associated morbidity and mortality, screening for early diagnosis may be one of the best strategies we can employ to fight against this insidious ailment. Although various radiographic modalities are readily available to help practitioners identify potentially troubling and suspicious breast cancer lesions, mammography remains the mainstay of breast cancer screening.² Dr. Pan and colleagues authored a very impressive article addressing the clinical outcome of an 8-year nationwide mammography screening in Taiwan.³ Based on the authors' findings, they concluded that there is still room to ameliorate the efficacy of the breast cancer screening process through comprehensive and continued education, improving the competence of cancer detection, and decreasing the number of false negative cases found in mammography screening in Taiwan.³ In addition, Dr. Pan and his colleagues responded to Dr. Wang's comment² and wrote that the risk factors of breast cancer are multifactorial; therefore, it is impractical to expect to reduce the incidence rate of breast cancer from mammographic screening alone.³ However, this response did not appear to fully address the question. With the exception of certain extremely rare neoplasms, the risk factors for the vast majority of neoplasms are multifactorial.^{4,5} In addition, Pan and colleagues further favored the value of mammographic screening because a properly administered screening program is used to detect lesions at an earlier stage, and hopefully reduce subsequent medical expense and mortality.² We completely agree with Dr. Pan's response. However, in our understanding, it would appear that the purpose of Dr. Wang's inquiry might be to question the benefit of mammographic screening in Taiwan (did mammography screening indeed increase the outcome of breast cancer?). With this question in mind, a recently released report might be of some important to our audience.

A report from Miller and colleagues in February of 2014, presented the results of 25 years of follow-up in the Canadian study.⁶ This study is important because it demonstrated the following strengths, including its randomized design, an intense level of ongoing intervention with five annual mammography screenings, a high rate of compliance, and comprehensive, long-term follow-up.⁷ The results of this study showed that there was no difference in breast cancer mortality between the mammography and control arms. However, there was a significant excess of incidence of invasive breast cancer observed in the mammography arm, resulting in 22% overdiagnosis,⁷ suggesting that 22% of screening-detected invasive breast cancers would not have reduced a woman's life expectancy if left undetected.⁶ The message might disappoint many physicians, including radiologists and the majority of women who participate in regular mammography screening. This finding seemed to add fuel to the recent firestorm surrounding this common screening test,⁷ suggesting that the benefits of mammography in routine practice may be questionable. In addition, this message derived from Miller's study may be consistent with our own knowledge; the results of Miller's study are strikingly similar—for both lack of efficacy and extent of overdiagnosis—to recent studies evaluating today's screening programs.⁸ Due to the absence of any significant proven benefits of mammography to combat breast cancer when such screening was performed in all women, we argued against such a practice.

Finally, Dr. Pan responded to Dr. Wang's other comment, saying that a further analysis of the financial cost and emotional support is beyond the scope of the original study they made.² We agree with Dr. Pan's answer. However, we hope that in the future, such analysis will be performed because it brings into question the entire mammography screening process as it currently exists. If current screening methods are not improved, and continue to fail to enhance the outcomes of screened women, why should we do this? This controversy relating to screening mammograms requires additional research and discussion.

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Conflicts of interest: The authors have no conflicts of interest to declare related to the subject matter or materials discussed in this article.

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