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Knowledge about tamoxifen harms and benefits and information provision

An exploratory sensitivity analysis investigated participants' objective knowledge of tamoxifen's benefit (reduce breast cancer risk) and harms (endometrial cancer, menopausal symptoms, blood clotting), with missing data classified as 'poor' knowledge. In total, 25 (6.1%) women had missing data on at least one of the four items; 12 (2.9%) people had missing data for all 4 knowledge items, 3 (0.7%) people had missing data for 3 items, 1 (0.2%) person had missing data for 2 items, and 9 (2.2%) people had missing data for 1 knowledge item.

The exploratory analysis yielded similar proportional findings in objective knowledge compared with the main analysis. Only 14.7% (95% CI: 11.4-18.5) of women correctly identified the potential benefit (breast cancer risk reduction) and all three potential harms (endometrial cancer, menopausal symptoms, blood clotting) of using tamoxifen, compared with 15.7% (95% CI: 12.2-19.7) in the main analysis. Overall, 58.3% of women (95% CI: 53.4-63.2) were aware tamoxifen could reduce breast cancer risk in the exploratory analysis, while 60.9% of women (95% CI: 55.8-65.7) were aware of this benefit in the main analysis. Nearly half of the sample in the exploratory analysis were aware women taking tamoxifen were more likely to experience menopausal symptoms (48.3%; 95% CI: 43.3-53.3) and blood clotting (47.3%; 95% CI: 42.4-52.3), and 26.2% (95% CI: 22.0-30.8) had knowledge about the increased risk of endometrial cancer associated with tamoxifen. This compared with estimates in the main analysis of 50.1% (95% CI: 45.1-55.2), 49.7% (95% CI: 44.7-54.8) and 27.3% (95% CI: 22.9-32.0), respectively. In the exploratory analysis, 17.2% (95% CI: 13.6-21.2) of women recognised all three potential harms associated with taking tamoxifen, while 18.2% (95% CI: 14.5-22.4) women were aware in the main analysis.

There were few changes in the univariable and multivariable logistic regression models findings, compared with the findings in the original analysis (Table S3). In the multivariable analysis, women with a higher level of education (odds ratio [OR]=2.47, 95% CI: 1.23–4.97, $p = 0.011$) and with higher

numeracy levels (OR=6.14, 95% CI: 1.39-27.09, $p = 0.017$) were still more likely to have good knowledge about the potential benefits and harms of tamoxifen. The original analysis yielded similar findings for higher level of education (OR=2.24, 95% CI: 1.11–4.55, $p = 0.025$) and higher numeracy levels (OR=5.91, 95% CI: 1.33-26.19, $p = 0.019$).