



THE IMPACT OF DIFFERENT BREAST SUPPORT GARMENTS ON LARGER BREASTED WOMEN WITH NON SPECIFIC BACK PAIN

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Background

Larger breasted women are at higher risk of wearing ill-fitting breast-support garments. Failure to support breasts during everyday activity can lead to physiological conditions including back and breast pain. This study aimed to identify initial and short-term (4 weeks) biomechanical change and patient reported outcome measures (PROMS) in larger breasted women with non-specific back pain (NSBP) when wearing different breast-support garments.

Methods & Results

20 females (Age: 32.1 ± 9.4 years; Bra sizes: 36DD-32K) with NSBP were recruited using modified red flags screening. Participants were tested initially in their usual bra, followed by the professionally-fitted and Optifit bras, in randomised order. Pre/post assessments comprised an established bra-fit assessment, body chart analysis, frequency of wear and pain, continuous-pain intensity (SF-MPQ-2), back stiffness and discomfort, neck disability and thoracic posture in standing using 3D-movement analysis.

100% of Usual and 90% of professionally-fitted bras failed the bra-fit assessment, compared to 5% with the Optifit. Though worn the least on average, a short-term intervention with the Optifit bra resulted in significant reductions in reported thoracic pain, clinically important reductions in neck disability, back pain frequency, continuous-pain intensity, stiffness and discomfort compared to the other bras. The Optifit and professionally-fitted bras significantly reduced reported lumbosacral pain. Whilst there was no initial change in thoracic posture with the Optifit bra, significant improvements in flexion-extension posture were seen post-intervention.

Conclusions

Following a short-term intervention, larger breasted women with NSBP appear to show some clinically important improvements. Provision of correctly fitting breast-support garments may contribute to better clinical management of NSBP in these women.

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