

EFFECT AND MODERATORS OF PAIN NEUROSCIENCE EDUCATION AFTER SURGERY FOR BREAST CANCER: A DOUBLE-BLINDED RANDOMIZED CONTROLLED TRIAL



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BACKGROUND

BREAST CANCER

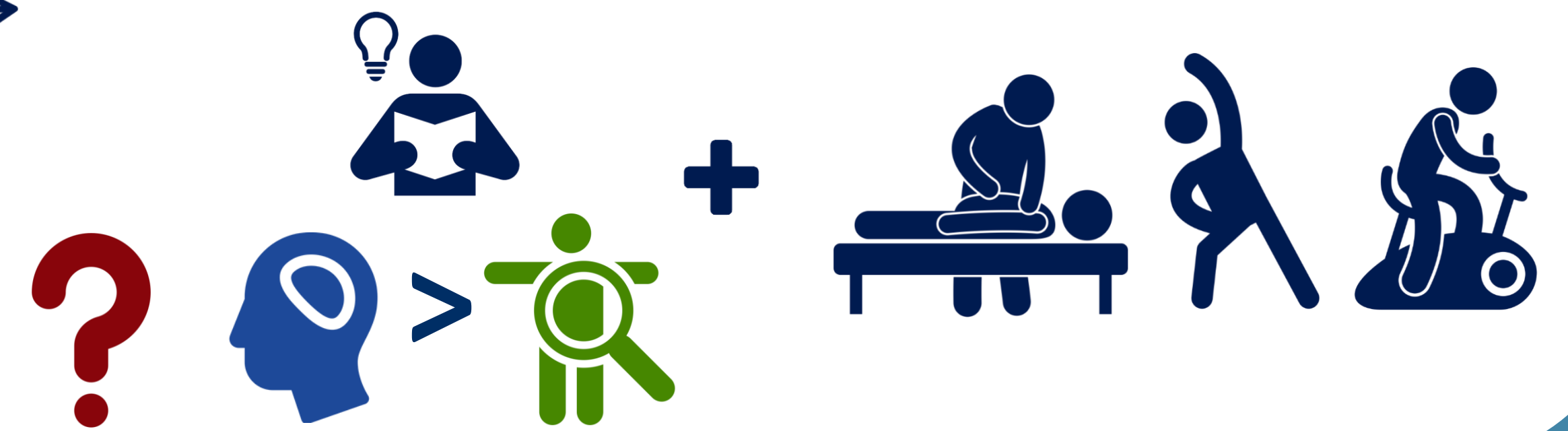
- Most prevalent cancer among women worldwide
- Survival rates & life expectancy rise: growing number of survivors suffering from side effects breast cancer (treatment)

PAIN

- Frequent, long-term side effect affecting daily-life activities
- Despite current postoperative (non-)pharmacological treatment
- Addition pain education to improve knowledge, attitude to pain?
- Clinically relevant effect of (biomedical) pain education absent

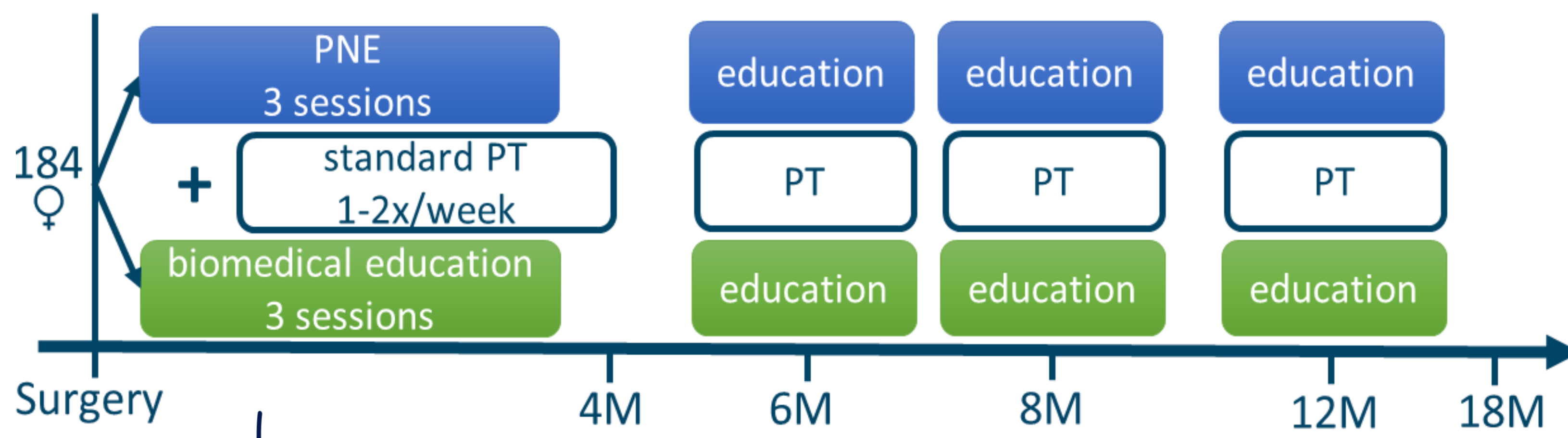
RESEARCH QUESTION

Pain Neuroscience education (PNE) + best evidence physiotherapy (PT) after breast cancer surgery, more effective on pain-related, physical and psychosocial functioning, than providing biomedical pain education?



METHODS

Double-blinded randomized controlled trial



	PNE	Biomedical education
Causes of pain	Pain ≠ tissue damage	Pain = tissue damage
Anatomy	(central) nervous system	Muscles & joints
Sustaining factors	Anxiety, stress, thoughts	Posture, structures
Physical activity	Graded activity	Current recommendations (ACS-guidelines)

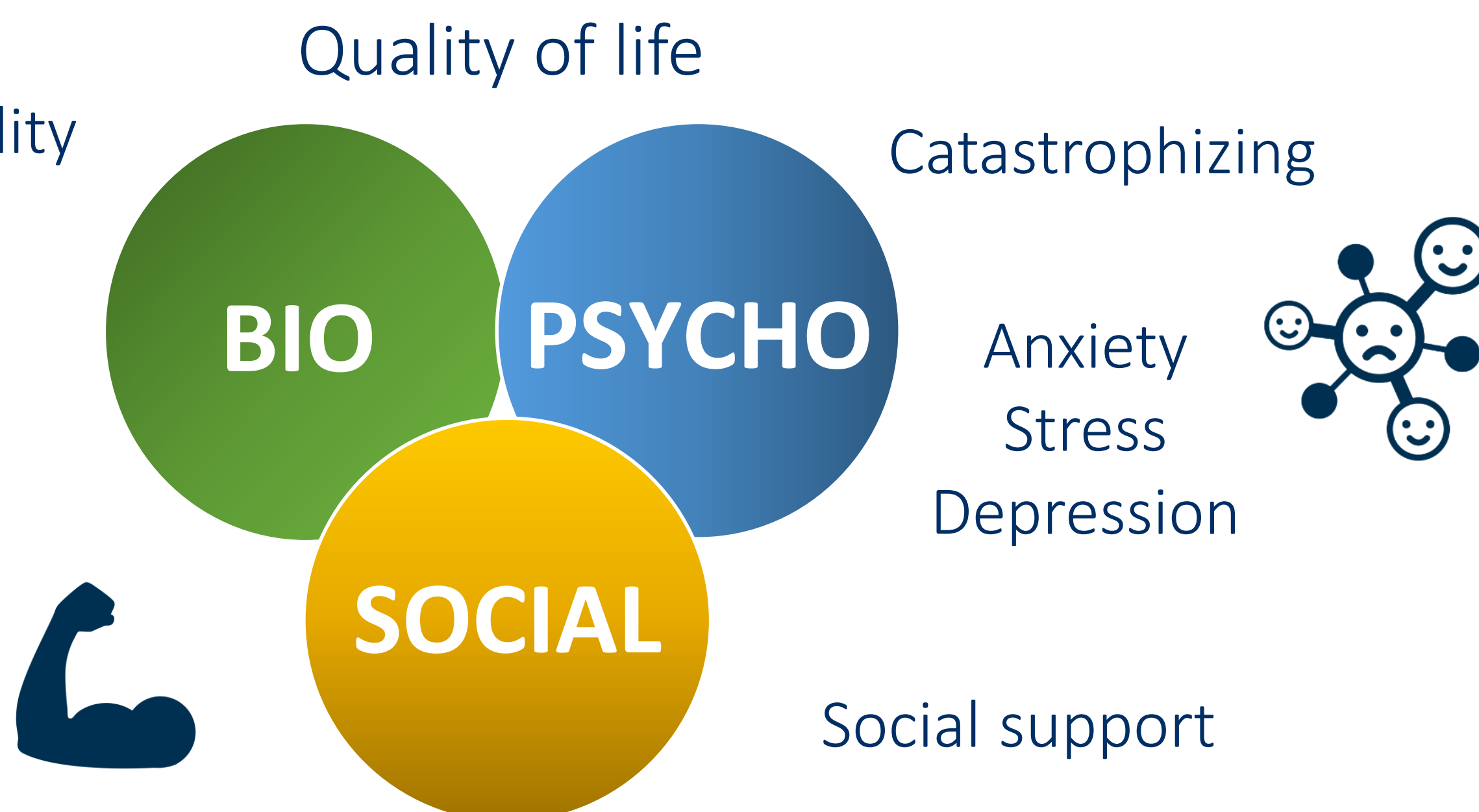
Outcomes

Pain-related disability (primary outcome)



Pain intensity

Physical activity



Statistical analysis: Multivariate linear models for repeated (longitudinal) measures to compare changes

RESULTS

Change in pain-related disability from baseline to 12 months did not differ between groups ($p=0.525$). Similar results for secondary outcomes.

The moderator analysis found no pre or post-operative variable influencing the effect of PNE.

CONCLUSION

Adding 6 sessions of PNE to standard PT after breast cancer surgery did not result in a better course of functioning up to 18 months postoperatively as compared to biomedical pain education. Nonetheless, this study can provide valuable recommendations.

RECOMMENDATIONS

For clinical practice



Explore the biological, psychological, and social factors contributing to pain



Integrate pain education into other treatment modalities (e.g. exercise)



Provide information when the patient is ready and willing to receive it

For future research



What information about pain do patients need after treatment for breast cancer?



When is it best to provide more detailed information about pain?