



# The impact of a mindfulness-based programme on stress and anxiety of family caregivers of adult patients on peritoneal dialysis in Singapore

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## Introduction

In Singapore, the prevalence of patients on peritoneal dialysis (PD) continues to increase from 12.3% to 20.7%.<sup>1</sup> PD is a home-based therapy, which requires a significant amount of self-care with a dedicated and trained caregiver especially for dependent patients. The practice of mindfulness has been found to significantly reduce stress, anxiety, and helps to increase positive emotions and improve overall quality of life (QoL).<sup>2,3,4</sup>

## Objective

This study aimed to investigate the effectiveness of a mindfulness-based programme in reducing stress and anxiety among family caregivers of patients on peritoneal dialysis (PD).

## Methodology

### Two group randomised controlled trial

**Setting:** Outpatient PD Centre of Singapore General Hospital (SGH)

**Sample population:** Family caregivers of PD patients

**Study timeline:** Baseline (T1), 4 weeks (T2), 3 months (T3), 6 months (T4)

### Outcomes

- Perceived Stress Scale (PSS)
- State-Trait Anxiety Inventory – Trait (STAI – T)
- State-Trait Anxiety Inventory – State (STAI – S)

Treatment-as-usual,  
(TAU group)

Mindfulness therapy,  
(MT group)

Structured PD training program

- Structured PD training program
- 4 sessions of mindfulness training
- Patient practice logbook
- CD and web link of mindfulness practice
- Reminder call to practice mindfulness

## Results

44  
participants

MT : 18

TAU : 28

- No significant group differences at T1, T2, T3 and T4.
- No difference found between groups.
- No significant difference in time effect for PSS and STAI-S, but significant for STAI-T ( $p = .021$ ).
- Significant difference found between groups over four time points for PSS ( $F=4.998$ ,  $p = 0.004$ ) (Figure 1) and STAI-T ( $F=5.011$ ,  $p = 0.004$ ) (Figure 2), but no significant difference for STAI-S (Figure 3).

Figure 1: Group \* Time of PSS

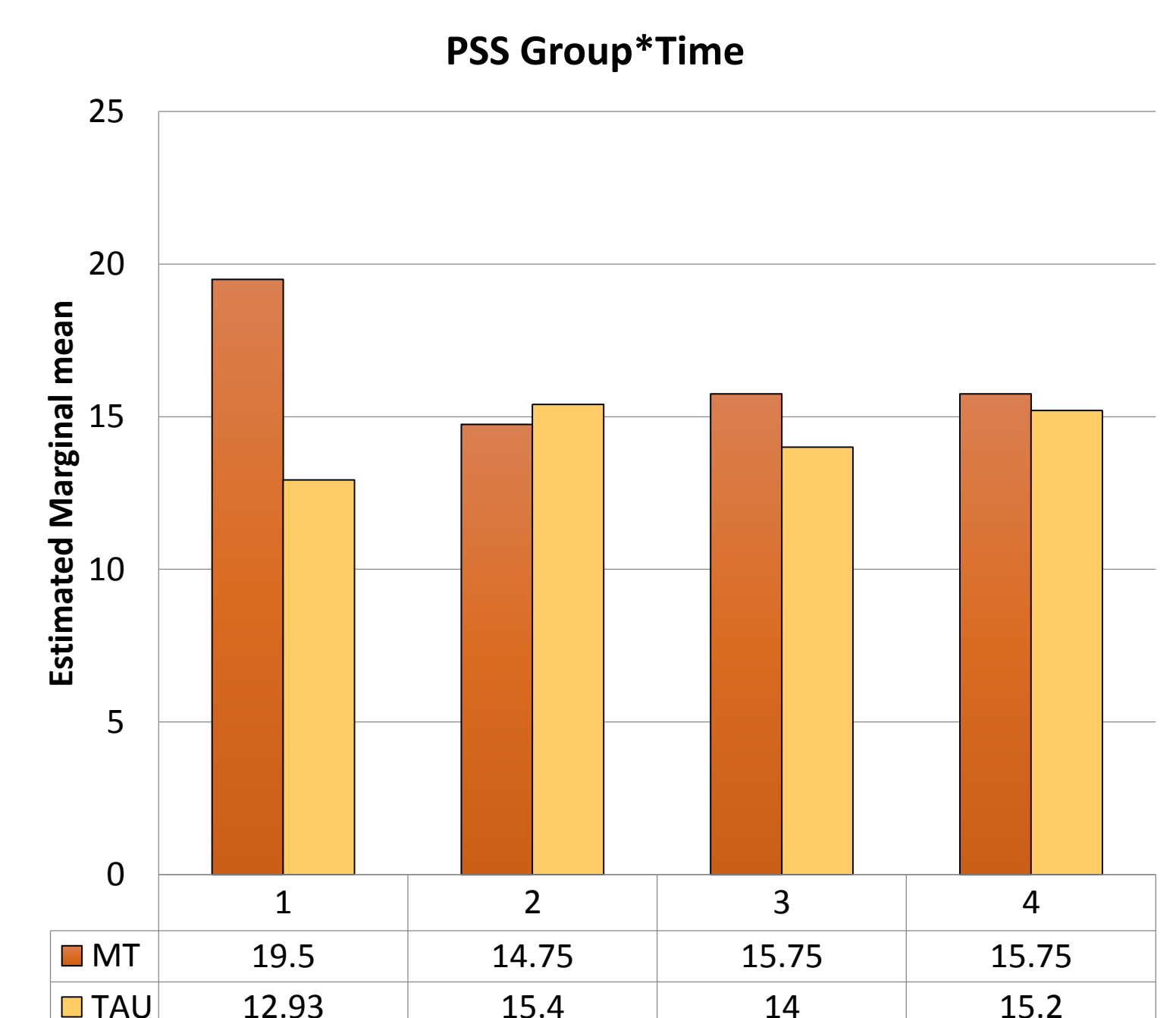


Figure 2: Group \* Time of STAI-T

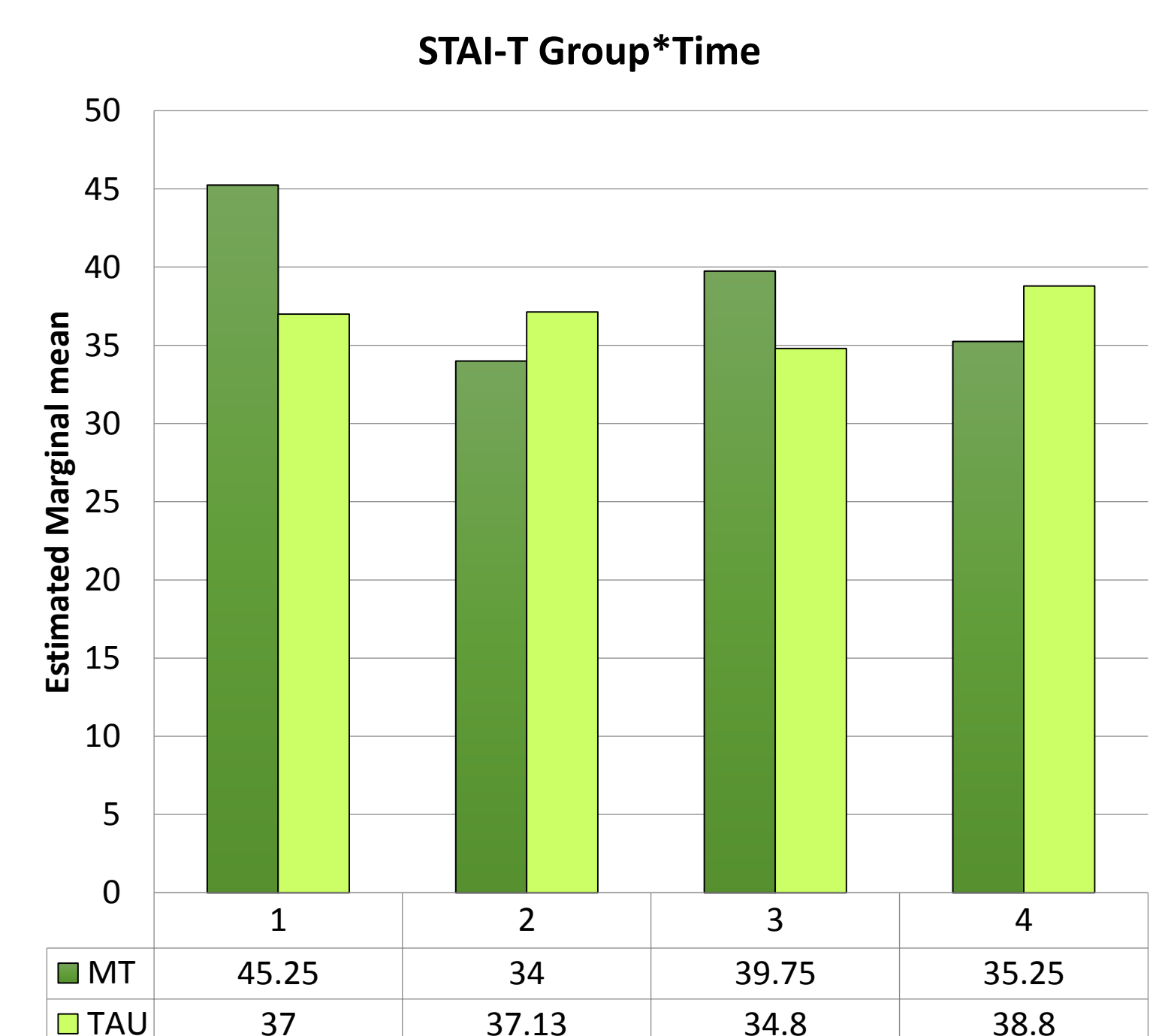
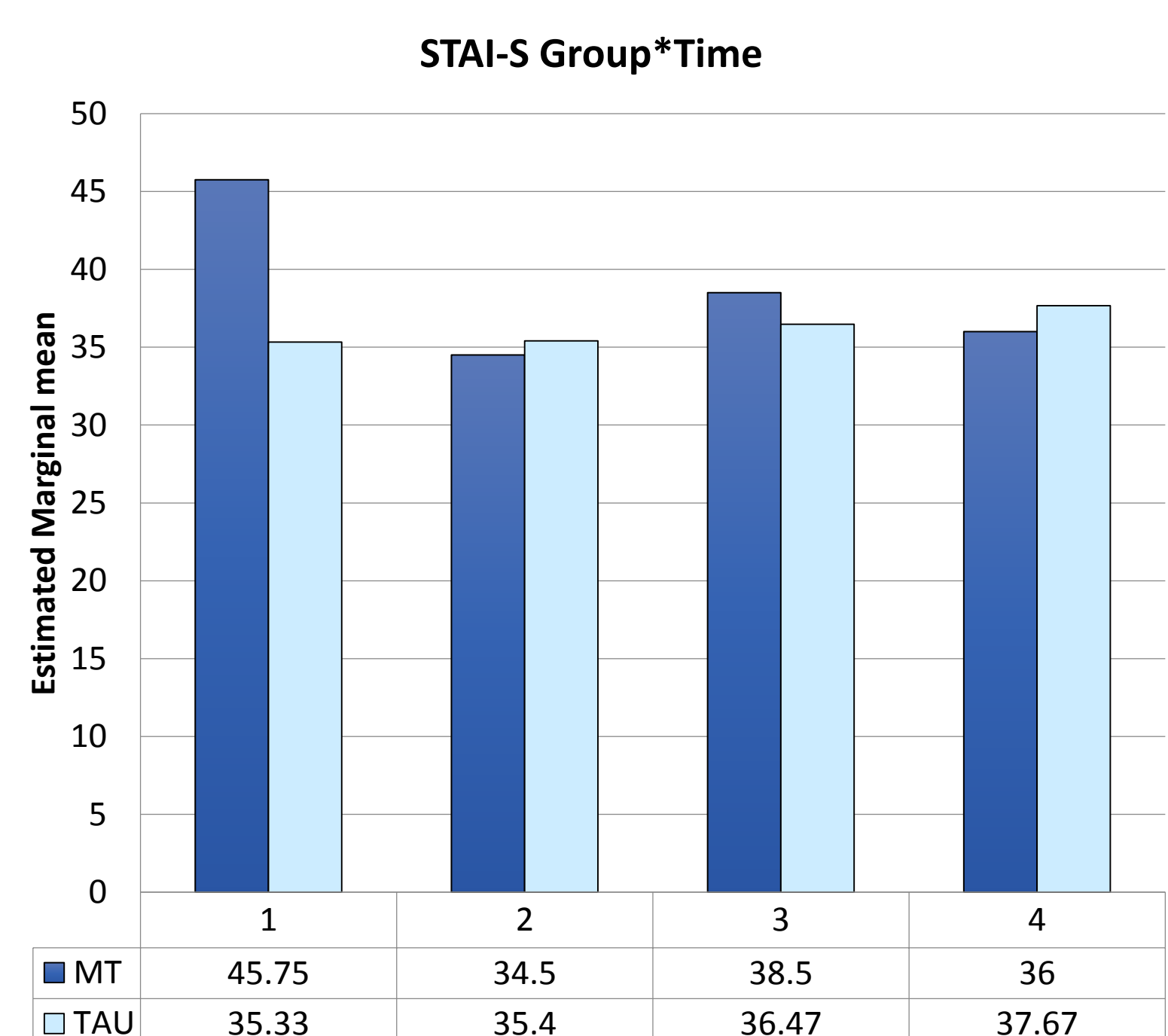


Figure 3 : Group \* Time of STAI-S



## Conclusion

Mindfulness-based training has shown to be effective at reducing anxiety and perceived stress among family caregivers. However future studies will need to evaluate this training method with a longer follow-up and larger sample size.

## References

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