

Post-traumatic stress among paramedics: an observational repeated measures study

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Background

- Paramedics have higher rates of probable post-traumatic stress disorder (PTSD) compared to the general population, likely due to their repeated and cumulative exposure to work-related potentially psychologically traumatic events (PPTEs).
- Most post-traumatic stress (PTS) symptoms resolve within a few days or weeks following PPTe exposure, so some paramedics can experience considerable distress and impairment on a daily or weekly basis, despite not meeting PTSD diagnostic criteria.
- Little is known about PTS symptoms among paramedics over time, or how individual risk and protective factors may influence PTS symptom severity.

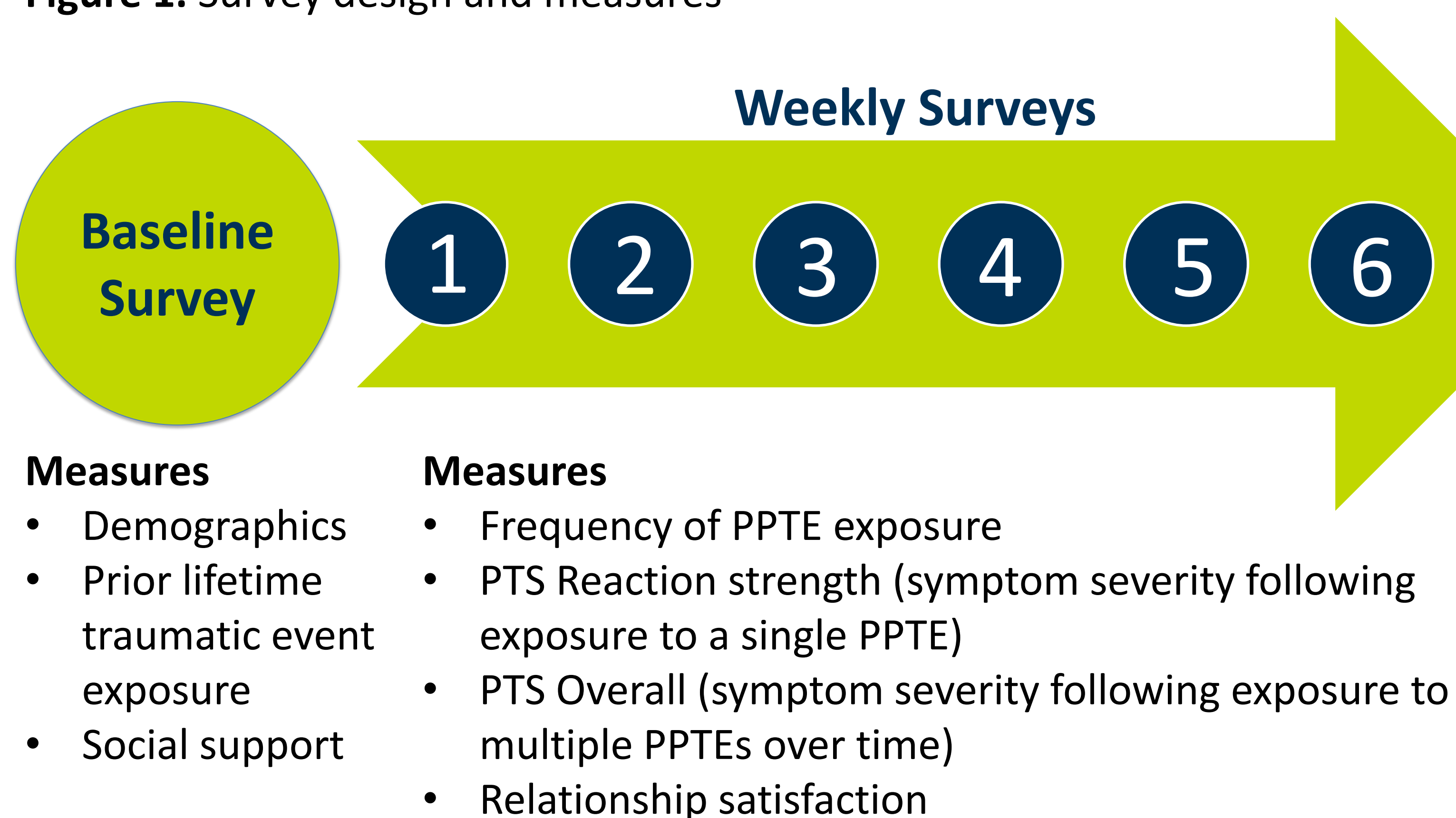
Aims:

1. Evaluate the week-to-week experiences of PTS symptoms among paramedics over six-weeks.
2. Explore risk and protective factors that may influence PTS symptom trajectory in paramedics over time.

Methods

- An observational repeated-measures study (Figure 1) evaluated the experiences of PTS symptoms among 31 frontline Australian paramedics who self-identified as having an intimate partner/spouse.
- Simple linear regression analyses were performed to determine bivariate correlations between prior lifetime traumatic event exposure, social support, PPTe frequency, relationship satisfaction, and PTS symptoms.

Figure 1. Survey design and measures



Results

Table 1. Descriptive statistics (N = 31)

	M ± SD (Range)	Median
PTS overall	33.2 ± 50.9 (0-198)	13
PTS reaction strength	14.7 ± 17.0 (0-69)	9
Relationship satisfaction	181.9 ± 28.3 (88-210)	190
Frequency of PPTe exposure	10.1 ± 18.8 (0-96)	4
Social support	4.3 ± 0.5 (3.32-5)	4.26
Prior lifetime traumatic events	11.4 ± 2.7 (6-16)	11

Note. N – number of participants; M – mean; SD – standard deviation, PTS – post-traumatic stress, PPTe – potentially psychologically traumatic event.

Figure 2. Results from bivariate analyses

Paramedics who experienced more prior lifetime traumatic events experienced more PTS overall (<i>Adj. R</i> ² = .096*), but not larger PTS reactions (<i>Adj. R</i> ² = .026)	Paramedics exposed to a higher frequency of PPTEs during the study period experienced more PTS overall (<i>Adj. R</i> ² = .511**) and stronger PTS reactions (<i>Adj. R</i> ² = .252**)
Perceived social support did not influence how much PTS paramedics experienced overall (<i>Adj. R</i> ² = -.034) or the strength of their PTS reactions (<i>Adj. R</i> ² = -.032)	Relationship satisfaction did not influence how much PTS paramedics experienced overall (<i>Adj. R</i> ² = -.043) or the strength of their PTS reactions (<i>Adj. R</i> ² = -.031)

*p<.05, **p<.01

Discussion

- This study demonstrates an important link between prior trauma history, frequency of PPTe exposure, and PTS symptoms over time.
- Findings could assist in early identification of paramedics at risk of PTS symptoms to promote timely follow-up and intervention.