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A systematic review of literature on the mental health and wellbeing of spouses, partners, and children of emergency responders

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Study Aim:

To review international evidence about the mental health and wellbeing of ER families in respect to:

- I. What has been studied around MH and W outcomes and experiences in ER families?
- II. What is MH and W prevalence, and the risk and protective factors for ER Families?

Method:

Reviewed 43 studies, 27 were based on quantitative data. The majority:

- used a quantitative, cross-sectional design
- were conducted in the United States
- over half of the studies looked at police/law enforcement families.

Findings:

The data was examined according to five themes:

Theme 1: Spousal/partner mental health and wellbeing

Key finding: Existing data is more suggestive than solid about the prevalence of MH and W issues in ER families.

Three studies looked at prevalence, including one Australian police study that found 14.0% of spouses reported probable PTSD and distress related to social dysfunction and somatic symptoms. Another study found US police spouses reported only mild symptoms of STS, yet another study of US police spouses found significant qualitative evidence of STS. Specifically, they described nausea, intrusive thoughts, and fear and anxiety in relation to the occupational trauma experienced by their police partners. An Australian study found that the informal caregivers of ERs (spouses/partners, family members and friends) reported higher levels of psychological distress, depression, anxiety, poorer quality of life, worse sleep and lower levels of physical activity compared to the general population. This study had a small sample size (n = 30).

- Feeling alone in the relationship: Studies found that spouses of US police officers, paramedics and firefighters reported feeling they were like a single parent since they felt solely responsible for managing the household and children. The sense of parenting alone and the inequitable distribution of family responsibilities was a consistent theme, attributed to factors such as long working hours, unpredictable shifts.
- Worry about their ER partner/parents' exposure to traumatic incidents Five studies consistently found that spouses of ERs in the US and Canada worried about the danger involved in their partners' ER occupations.
- *Divorce* Study findings vary. One found that in the US, divorce is lower in ER marriages than the national average but overall, there is a lack of data to draw conclusive comparisons. A study of US female firefighters found a lower prevalence of marriage (42.6% v the national



average of 55.4%) and a higher prevalence of divorce compared with comparative female census data (32.1% v 10.0%) [40].

- *Relationship communication and withdrawal* Evidence of emotional withdrawal in ER relationships was strong, with different factors suggested in the studies for relationship withdrawal including:
 - withdrawal behaviour associated with PTSD/STS
 - partners protecting each other from difficult experiences to reduce conflict
 - behaviours learnt by ERs in their roles causing withdrawal in relationships (e.g., being unemotional and detached from work)
 - the impact of work stress or shift work and ER/spousal withdrawal.
- Pushing emotional needs aside to avoid conflict The theme of 'emotional compensation' is strong in several studies. An example here is the study which found that on days of high work stress, the partners of police regulated their own emotions to avoid conflict (this study also reported that police job stress created an environment for future marital distress and toxic marital interaction). This is corroborated by research on Australian police that found high scores for hyperarousal, while partners scored low on arousal. Another study found the inverse – that spouses did more emotional labour to ease the burden on their police partners exposed to trauma. Significantly, these studies found that while the short term implications of emotional compensation helped avoid conflict, in the long run it was damaging to relationships because it promoted emotional withdrawal and negative wellbeing outcomes.
- Domestic Violence/ Intimate Partner Violence Ten papers (all of US police) used self-reported/case study data (but not from families themselves) about domestic violence. Very little is known but estimates of self-reported physical aggression against a spouse/partner (slapping, punching, injuring, losing control and becoming physically aggressive) ranged from 7.4% -10.0%, and 8.1–8.9% for physical aggression against children. Three papers reported that police officers who exhibited 'authoritarian spillover' (using authority and command from their role as police officer in domestic settings) or the 'desire to be in control' were more likely to perpetrate domestic violence than those who did not display authoritarian spill over. Two papers suggested that job stress or exposure to violence increased authoritarian spill over. Other studies have suggested that pre-policing events affect police officers' likelihood of domestic violence.

Theme 3:Child mental health and wellbeing.Key Finding:Children are impacted by their parents' work, though evidence on MH and W
outcomes is not clearcut.

Seven studies assessed the mental health and wellbeing of children from ER families. Six studies came from the US and one study from Israel.

In one study on the Boston Marathon bombing manhunt found the 10.8% of children whose parents/ relatives were involved in the response reported probable PTSD compared to 1.9% of children who did not have an ER parent or relative. Two studies found that children of EMTs who worked during the 911 disaster reported the highest probable PTSD (18.9% and 15%), followed by children with a police parent (10.6% and 8%) and then by those with a firefighter parent (5.6% and 3%). If there were two ERs as parents or in the wider family, then the prevalence of PTSD increased to 17.0%, and if the kids were directly exposed to media footage the rates were even higher. Keeping in mind that poorer non-white families are over-represented in US EMT populations, demographics account for some of these differences.



Studying the relationship between ER parents and behaviours, one article reported dysphoric arousal symptoms in police parents that were associated with their children being more fearful and clingier, and as presenting with more externalising behaviours and increased somatic problems. The prevalence of child behavioural problems was 20.0% for police responder children after 911, which was less than the comparison group (such as construction workers involved in the World Trade Centre site after 911) of 31.4%. They explained this as being possible because, whilst PTSD in police parents has a large impact on their children's health, it may also be that ER families are more accustomed to coping with trauma and therefore experience fewer negative outcomes compared to other families.

In a study of Israeli children of ERs found that, compared to the control group of non-ER families, paternal exposure to traumatic events was significantly related to child PTSD symptoms. In final models however, there was a non-significant relationship of paternal ER status and child PTSD symptoms. The authors posit this finding may be due to more firefighters in their sample whose children may have lower levels of PTSD compared to other ER branches, supporting previous studies. This study also identified that maternal exposure (vicariously through partner occupation) was significantly associated with a higher number of symptoms of anxiety, depression and other mental health disorders in children.

Four qualitative studies examined why children of ERs may have adverse mental health and wellbeing outcomes. One found that US police working in child abuse investigation roles reported strained and overprotective relationships with their children, as well as less time and empathy with their children because of their police roles. Another that investigated the lived experiences of children of police officers found:

- they felt overprotected by their parents
- harassed and bullied by others because of their parent's occupation
- worried for the parent's safety.

In a more general ER context, children were found to conceal their emotions by putting on a 'brave' face, whilst simultaneously being concerned for the safety of their ER parent.

Theme 4:Family support from the organisation and coping strategies.Key finding:Little or no government and organisational support for families was reported

One Australian study found that spouses of ER's with PTSD felt lonelily and had difficulty finding peer support from people who understood PTSD.

Five studies highlighted that informal social support was crucial for ER spouses/partners and families to deal with day-to-day pressures of ER life.

Three studies emphasised the positive impact of social support in the aftermath of bereavement in ER families; one that traced social support amongst 9/11 firefighter widows over a decade found it played a lasting and enduring role in their recoveries. This was linked to Post Traumatic Growth, which the author looked at in another study of the widows of the New York Fire department workers.

Where there was high support between spouses, individuals were more likely to use *active rather than avoidant coping* (where active is using problem-focused methods to control stress). This positive relationship was stronger for couples working in the same workplace, such as dual serving police couples.

Australian ambulance personnel who deployed coping strategies (such as self-care, social support and rational cognitive coping) generated, when compared to the general population, positive impacts on ER family functioning.



Theme 5: Positive Outcomes

Key finding: Understanding and measuring positive aspects of ER occupations on family life should be a focus for future research

A minority of papers reviewed evidence of positive outcomes or attributes a functioning family life. Two consistent themes were family pride in the job role and the benefits of camaraderie, yet these themes were not directly assessed in relation to family wellbeing and functioning. Other findings:

- Children of police officers described the benefits of their police parent in terms of feeling safe because of what their parent does, and more knowledgeable about their rights and legal protections.
- Police spouses described the benefits of the police career choice such as camaraderie, helping others, pride felt in the job, financial security and health insurance benefits.

Conclusion

- There is some evidence of the negative impact of the ER occupation on the mental health and wellbeing of ER families. Evidence is however limited in volume, topic areas and methodological approaches.
- More quantitative and qualitative research is needed to understand the prevalence of outcomes, associated risk/protective factors and experiences of ER families.
- This area of research is important to improve knowledge of baseline needs to be able to target interventions to support ER families.
- Improving ER family wellbeing is important for targeted interventions, improvement in public health, and supporting ER's job satisfaction, retention, and operational effectiveness.