

## **Are organisational responses by police forces appropriate to adequately safeguard police officer wellness? A review of the scientific evidence**

### **Introduction**

Recognising the importance of having a healthy workforce in law enforcement, this article presents findings from an audit of published systematic reviews since 2012 that have considered police officer wellness (also known as wellbeing) and mental health. As recognised by Birch et al (2017), wellness is a complex concept, but can be understood as:

*'Within a person's occupation, the need to experience positive relations and a sense of fairness is important for individuals in order to achieve wellbeing, as such a relationship between wellbeing and social justice in the workplace needs to exist' (National Institute of Wellbeing Australia, n.d.).*

Such an understanding for police officer wellness, suggests that police officers need to experience a workplace that stems from organisational justice, which includes the retention of staff and ensuring a safe and happy workforce. This is a position that has been supported by the work of Beckley (2014) and Birch et al (2017) as an illustration. However, as more recent evidence has shown, police organisations are not fostering wellness and positive mental health for their officers. On 25 November, as an example, a national newspaper in Australia reported that the state police of Victoria lost almost 140,000 shifts during 2021-22 through mental health problems and injuries (Johnston, 2022). A police spokesperson was reported to have said:

*'Mental health injuries, including those resulting from exposure to traumatic events, were the cause of around three-quarters of lost shifts' (Johnston, 2022).*

In the state of Victoria in Australia, Victoria Police is staffed by 16,000 police officers and 3,300 unsworn staff. The data supplied by the police revealed that there were 382 shifts lost daily, 2,600 shifts weekly and 11,600 shifts monthly. The unfilled shifts numbered 139,482 which were 3.3% of overall shifts. These statistics illustrate the high impact of mental health and wellbeing of police officers on the effective provision of police services in this one state. More broadly, the work of Kyron et al (2019) found from a survey conducted with police officers that 10.7% of participating police officers had posttraumatic stress symptoms and 30.6% were shown to have high or very high distress levels. It is generally accepted, across the academic literature and within the profession of policing, that police work is a highly stressful and traumatic profession, and several research studies have sought to identify specific stressors (e.g. Brown et al, (1999; Vickers et al, 2014; Craven et al 2020). In 2016, the Australian New Zealand Policing Advisory Agency (ANZPAA), which is the council of all chief police officers issued a good practice framework for mental health and wellbeing in first responder organisations. The principles of the framework noted:

*'Our organisations and people have a shared responsibility to support mental health and wellbeing initiatives so that we can all achieve our full potential' (ANZPAA, 2016).*

Consequently, this paper seeks to examine the scientific evidence, to date, in order to understand what police forces, need to be doing in order to safeguarding the wellness and mental health of police officers.

### **Methods of the study**

The research present in this paper was guided by the research question:

*'Is the current organisational response by police forces appropriate and sufficient to adequately safeguard police officer wellness and mental health?'*

In order to address this question a review of published systematic review research conducted on police wellness and mental health since 2012 was conducted, drawing on the methodological approach of the Scale for the Assessment of Narrative Articles (SANRA).

### **Scale for the Assessment of Narrative Articles (SANRA)**

The scale for the assessment of narrative articles (SANRA) is the methodology that assesses the value and relevance of a systematic review. According to Baethge, Goldbeck-Wood, and Mertens (2019), narrative reviews are the commonest type of articles in the medical literature; the SANRA review was intended to fill the gap as previously, these types of articles were not assessed for their quality of writing or efficacy. The SANRA process exposes a systematic review to an assessment of six questions, scoring each question on a scale of 0 to 2. The assessment questions are:

1. Justification of the article's importance for the readership;
2. Statement of concrete aims or formulation of questions;
3. Description of the literature search;
4. Referencing;
5. Scientific reasoning;
6. Appropriate presentation of data.

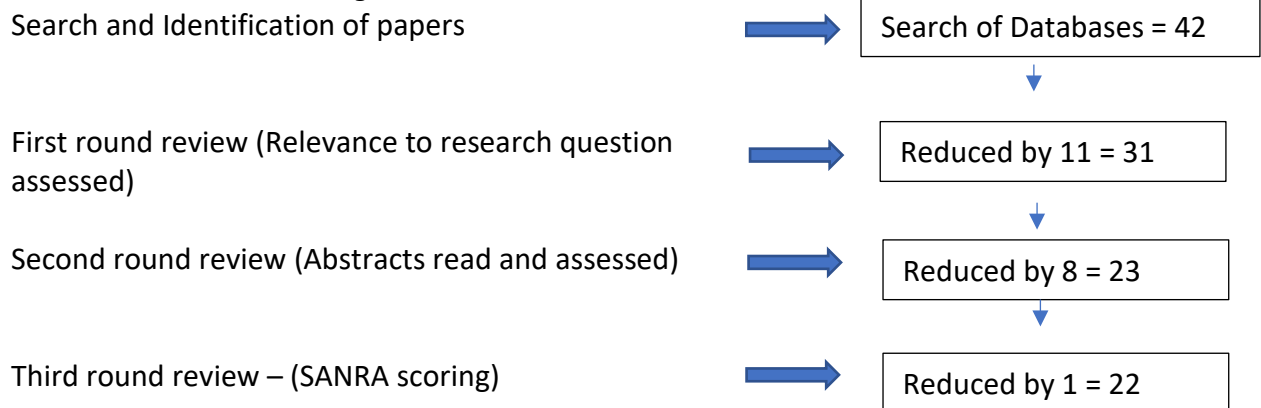
Following a pilot trial of the use of the SANRA process, the authors of this article added a 7<sup>th</sup> question to the six above, which would assist practitioners in assessing the efficacy of the recommendations or solutions offered by each systematic review. This question, question 7, in the SANRA process was: *'Policy Implications and suggestion for practice'*.

Each of the systematic review articles presented in this paper could therefore be awarded up to a total of 14 points, in the assessment of its quality, relevance and usefulness. Each member of the research team individually and independently assessed the articles, then recorded their assessment. It was decided that each totalled assessment from each researcher would be compared and if it was within 2 points of their colleagues' it was accepted into the study presented in this paper. Also, articles with a score totalling less than 7 (half of the possible total) would be excluded as it was deemed irrelevant to the study in question and below average quality. A study by Baethge et al, (2019, p.5) concluded three important elements for adopting a SANRA: (i) SANRA's can be applied to manuscripts in everyday editorial work. (ii) SANRA's internal consistency and item-total correlation are sufficient; (iii) SANRA's inter-rater reliability is satisfactory. Baethge et al, (2019), through their work, also encourage researchers to consider using SANRA to critically appraise articles.

### Search terms and process

A search through databases accessed via a university library system was conducted, in which the following keywords were adopted: 'Wellbeing' OR 'PTSD' AND 'Police Officers' OR 'First Responders' OR 'Emergency Management' AND 'Systematic Review', with a date range between 2012 and 2022 for systematic reviews to have been published. The search identified 42 papers; this was reduced to 31 during the first round of reviews. The abstracts from the remaining 31 journal articles were read carefully and a further 8 papers were excluded from the study due to a limited link to the research question or their usefulness for police practitioners in providing an organisational response to adequately safeguard police officer wellness and mental health. This left a final 23 papers to be submitted to the SANRA review process, although one paper was again rejected during this scrutiny as it scored a low score for relevance to the study presented in this paper. All three authors of this paper took part in the three rounds of reviews. Figure 1 outlines the SANRA process the authors engaged in:

**FIGURE 1: SANRA Screening Process**



Finally, 22 papers were successfully reviewed through the SANRA process, and these are listed in Table 1 below:

**TABLE 1: List of 22 journal articles included in the SANRA process**

1. Berger, W., Coutinho, E. S. F., Figueira, I., Marques-Portella, C., Luz, M. P., Neylan, T. C., Marmar, C.R., & Mendlowicz, M. V. (2012). Rescuers at risk: a systematic review and meta-regression analysis of the worldwide current prevalence and correlates of PTSD in rescue workers. *Social psychiatry and psychiatric epidemiology*, 47, 1001-1011.
2. Brooks, S.K., Rubin, G.J., and Greenburg, N. (2019). Traumatic stress within disaster-exposed occupations. *British Medical Bulletin*, 2019. 129:25-34.
3. Casa, J.B. and Benuto, L.T. (2021) Work-related traumatic stress spillover in first responder family: A systematic review of the literature. *Psychological Trauma: Theory, Research, Practice, and Policy*. 14(2), 209-217.
4. Cusack, K., et al. (2016). Psychological treatments for adults with posttraumatic stress disorder: A systematic review and meta-analysis. *Clinical psychology review*, 43, 128-141.
5. Garbarino, S., Guglielmi, O., Puntoni, M., Bragazzi, N. L., & Magnavita, N. (2019). Sleep quality among police officers: implications and insights from a systematic review and meta-analysis of the literature. *International journal of environmental research and public health*, 16(5), 885.

6. Golding, S. E., et al. (2017). Exploring the psychological health of emergency dispatch centre operatives: a systematic review and narrative synthesis. *PeerJ*, 5, e3735.
7. Haugen, P. T., Evces, M., & Weiss, D. S. (2012). Treating posttraumatic stress disorder in first responders: A systematic review. *Clinical psychology review*, 32(5), 370-380.
8. Laufs, J. and Waseem, Z. (2020). Policing in pandemics: A systematic review and best practices for police response to COVID-19. *International journal of disaster risk reduction*. 51 (2020) 101812.
9. Lewis, C., et al. (2020) Dropout from psychological therapies for post-traumatic stress disorder (PTSD) in adults: Systematic review and meta-analysis. *European Journal of Psychotraumatology*. 11.1, 1709709.
10. Marshall, R. E., Milligan-Saville, J. S., Mitchell, P. B., Bryant, R. A., & Harvey, S. B. (2017). A systematic review of the usefulness of pre-employment and pre-duty screening in predicting mental health outcomes amongst emergency workers. *Psychiatry research*, 253, 129-137.
11. Mona, G. G., Chimbari, M. J., & Hongoro, C. (2019). A systematic review on occupational hazards, injuries and diseases among police officers worldwide: Policy implications for the South African Police Service. *Journal of occupational medicine and toxicology*, 14(1), 1-15.
12. Pacella, M. L., Hruska, B., & Delahanty, D. L. (2013). The physical health consequences of PTSD and PTSD symptoms: a meta-analytic review. *Journal of anxiety disorders*, 27(1), 33-46.
13. Patterson, G. T., Chung, I. W., & Swan, P. W. (2014). Stress management interventions for police officers and recruits: A meta-analysis. *Journal of experimental criminology*, 10, 487-513.
14. Regehr, C. et al. (2021). A systematic review of mental health symptoms in police officers following extreme traumatic exposures. *Police practice and research*, 22(1), 225-239.
15. Rosenbaum, S., Vancampfort, D., Steel, Z., Newby, J., Ward, P. B., & Stubbs, B. (2015). Physical activity in the treatment of post-traumatic stress disorder: a systematic review and meta-analysis. *Psychiatry research*, 230(2), 130-136.
16. Sage, C.A.M., Brooks, S.K., and Greenberg, N. (2018). Factors associated with Type II trauma in occupational groups working with traumatised children: a systematic review. *Journal of Mental Health*, 27(5), 457-467.
17. Skeffington, P.M., Rees, C.S. and Kane, R. (2013). The primary prevention of PTSD: a systematic review. *Journal of Trauma & Dissociation* 14(4), 404-422.
18. Stanley, I.H., Hom, M.A., and Joiner, T.E. (2016). A systematic review of suicidal thoughts and behaviors among police officers, firefighters, EMTs, and paramedics. *Clinical Psychology Review*, 44 (2016). 25-44.
19. Syed, S., Ashwick, R., Schlosser, M., Jones, R., Rowe, S., & Billings, J. (2020). Global prevalence and risk factors for mental health problems in police personnel: a systematic review and meta-analysis. *Occupational and environmental medicine*, 77(11), 737-747.
20. Taylor, J., McLean, L., Korner, A., Stratton, E., & Glozier, N. (2020). Mindfulness and yoga for psychological trauma: systematic review and meta-analysis. *Journal of Trauma & Dissociation*, 21(5), 536-573.
21. Vancampfort, D. et al (2016). Type 2 diabetes among people with posttraumatic stress disorder: systematic review and meta-analysis. *Psychosomatic medicine*, 78(4), 465-473.

22. Webster, J.H. (2013). Police officer perceptions of occupational stress: the state of the art. *Policing: An International Journal of Police Strategies & Management*. 36(3), 636-652.

### **SANRA Review and Inclusion Process**

The 22 papers that were selected in this SANRA review analysed data from a total of 842 journal articles. Those articles listed a total of 447,264 participants of which 333,499 were classified as police officers which represented 69.9% of the number of participants. The remainder of the participants (approximately 30%) were military or other first responder organisation personnel. The average SANRA review scores (of the three reviewers/authors of this paper) allocated to each of the included journal articles is listed within table 2 below, with the score indicating the level of relevance and importance of each paper to the research question this paper presents on.

**TABLE 2: SANRA Inclusion Scoring**

|    | Author            | Date | # of Journal Articles within study | number of participants | # of Police Officer Participants | %age of police officer participants | SANRA Average Score out of 14 |
|----|-------------------|------|------------------------------------|------------------------|----------------------------------|-------------------------------------|-------------------------------|
| 1  | Berger et al      | 2012 | 28                                 | 20,424                 | 4,953                            | 24.3                                | 10.5                          |
| 2  | Brooks et al      | 2019 | 54                                 | NA                     | NA                               | NA                                  | 8                             |
| 3  | Casas & Benuto    | 2022 | 16                                 | 10,918                 | 855                              | 7.8                                 | 10                            |
| 4  | Cusack et al      | 2016 | 31                                 | 4,926                  | NA                               | NA                                  | 10                            |
| 5  | Garbarino et al   | 2019 | 13                                 | 3,722                  | 3,722                            | 100                                 | 12.5                          |
| 6  | Golding et al     | 2017 | 16                                 | 155                    | 24                               | 15.5                                | 10                            |
| 7  | Haugen et al      | 2012 | 17                                 | 201                    | 121                              | 60.2                                | 12                            |
| 8  | Laufs & Waseem    | 2020 | 72                                 | NA                     | NA                               | NA                                  | 10                            |
| 9  | Lewis et al       | 2020 | 115                                | 7,724                  | NA                               | NA                                  | 12                            |
| 10 | Marshall et al    | 2017 | 21                                 | NA                     | NA                               | NA                                  | 12                            |
| 11 | Mona et al        | 2019 | 36                                 | NA                     | NA                               | 100                                 | 9                             |
| 12 | Pacella et al     | 2013 | 62                                 | 60,528                 | NA                               | NA                                  | 9                             |
| 13 | Patterson et al   | 2014 | 12                                 | 724                    | 724                              | 100                                 | 8.5                           |
| 14 | Regehr et al      | 2021 | 17                                 | 33,883                 | 33,883                           | 100                                 | 13                            |
| 15 | Rosenbaum et al   | 2015 | 4                                  | 200                    | NA                               | NA                                  | 11                            |
| 16 | Sage et al        | 2018 | 13                                 | 1,756                  | 71                               | 4                                   | 12.                           |
| 17 | Skeffington et al | 2013 | 7                                  | 1,979                  | 56                               | 2.8                                 | 9                             |
| 18 | Stanley et al     | 2016 | 63                                 | 28,268                 | 16,289                           | 57.6                                | 11.5                          |
| 19 | Syed et al        | 2020 | 67                                 | 272,463                | 272,463                          | 100                                 | 12                            |

|               |                   |      |            |                 |                             |            |            |
|---------------|-------------------|------|------------|-----------------|-----------------------------|------------|------------|
| 20            | Taylor et al      | 2020 | 66         | 5659            | NA                          | NA         | 11         |
| 21            | Vancampfort et al | 2016 | 9          | 23396           | NA                          | NA         | 10         |
| 22            | Webster           | 2013 | 103        | 338             | 338                         | 100        | 10.5       |
| <b>TOTALS</b> |                   |      | <b>842</b> | <b>477,264*</b> | <b>333,499*<sup>1</sup></b> | <b>N/A</b> | <b>N/A</b> |

The authors adopted Braun and Clarke's (2006) thematic analysis approach in order to analyse the findings of the SANRA process. This yielded 4 themes that will be presented in the following findings section.

### Findings from the SANRA

The SANRA process elicited four main themes and related subheadings, as outlined in table 3, and will be presented in this section.

**TABLE 3: Themes from SANRA Review**

|   |
|---|
| <p><b>1. Occupational hazards, injuries, and diseases among police officers</b></p> <ul style="list-style-type: none"> <li>○ Mental Health symptoms in police officers following extreme traumatic exposures. [14<sup>2</sup>]</li> <li>○ Police officer perceptions of occupational stress [22]</li> <li>○ Suicidal thoughts and behaviours among police officers [18]</li> <li>○ Type 2 diabetes among people with posttraumatic stress disorder [21]</li> <li>○ Type II trauma – working with traumatised children [16]</li> </ul> <p><b>2. Treatment of PTSD in first responders</b></p> <ul style="list-style-type: none"> <li>○ Impact of PTSD on physical health [12]</li> <li>○ Primary prevention of PTSD [17]</li> <li>○ Identifying successful treatments for PTSD.[4]</li> <li>○ Sleep Quality. [5]</li> <li>○ Effects of stress management interventions for police officers. [13]</li> <li>○ Physical Activity treatment for PTSD [15]</li> <li>○ Mindfulness-based intervention on cortisol awakening response and health outcomes [20]</li> <li>○ Dropout from psychological therapies for PTSD [9]</li> <li>○ Pre-employment screening to predict mental health outcomes [10]</li> </ul> <p><b>3. PTSD in police officers, other issues</b></p> <ul style="list-style-type: none"> <li>○ Work-related traumatic stress spill-over into first responder families [3]</li> <li>○ Policing in pandemics [8]</li> </ul> <p><b>4. PTSD – other issues</b></p> <ul style="list-style-type: none"> <li>○ Disasters – Disaster-exposed occupations [2]</li> <li>○ Rescue Workers suffering from PTSD [1]</li> <li>○ Emergency Despatch Centre Operatives &amp; PTSD [6]</li> </ul> |
|---|

<sup>1</sup> \*Based on available data.

<sup>2</sup> Number of articles which addressed the theme/subtheme presented in this paper.

### Theme 1: Occupational hazards, injuries, and diseases among police officers worldwide

An early systematic review examined police officer perceptions of occupational stress' its findings identified gaps and inconsistencies in the literature but thought that it provided direction for future research (Webster, 2013). However, the study was based on papers going back to the 1970s and provided some historical background, along with the possibility that PTSD might be cumulative (p.645), in other words constant exposure to traumatic incidents such as fatal road collisions might result in psychological injury. Cumulative psychological injury was postulated in 1997 when the question was raised: 'Are police the "forgotten victims"' (Beckley, 1997:23).

Indeed, a 2016 systematic review (Stanley et al, 2016) of 63 papers suggested that more studies into suicidal thoughts and behaviours of 'first responders' are required using more rigorous methodologies and particularly longitudinal studies. It found that police officers are more likely to die by suicide than by homicide or accidents, and female police officers have a higher rate of suicidality, but a reliable estimate of suicide attempts among police officers is not yet available. Understandably, smaller police departments may have higher rates of suicide than larger departments, potentially due to fewer resources, and pre-enlistment screening can assist to reduce incidences of suicide. The review listed risk the correlates as:

'...occupational hazards and exposures; access to firearms; capability for suicide; erratic shift schedules; stigma preventing utilisation of services; a focus on helping others at the expense of focusing on personal needs; multiple high-risk roles; role transitions; smaller departments and concurrent or past military service experience'. Also, protective factors as: 'camaraderie; familial social support; organisational support and sense of purpose' (Stanley et al, 2016: 39-41).

A systematic review by Sage, et al (2018) examined 13 papers that dealt with 'Type II Trauma' in occupational groups working with traumatised children. The participants in the study included law enforcement officers (LEOs) and other operatives working in child protection and sought to identify secondary traumatic stress (STS) and cumulative PTSD in people carrying out this stressful work. There was an identification of both positive and negative coping strategies; positive supervisory support was generally good, but this study found that there was no significant association between exercise and STS; therefore, it could not be concluded to be a sound coping strategy (p.461). Generally, male workers had lower STS scores than females, and LEOS had more democratic, over-protective and authoritarian parenting styles than the control group; stricter parenting styles were found with increased numbers of abuse seen each year.

As noted earlier in the paper, PTSD and related stress is synonymous with police work, a finding that is reflected in policing globally, for example, in a Brazilian study found an elite unit of Brazilian police officers, 8.9% reported having PTSD with 16% having partial PTSD (Mona et al, 2019). Of the 36 international studies of the police included in that systematic review, findings revealed that psychological problems can lead to other health risks such as diabetes and hypertension, along with dyslipidemia (elevated cholesterol) and burnout. The paper, originating from South Africa identified the need for improved knowledge, control measures, management, and stakeholder participation for SAPS.

Another systematic review (Vancampfort et al, 2016) that examined nine publications, corroborated the findings in Mona et al, (2019) presented above by clarifying the prevalence and predictors of Type 2 diabetes mellitus (T2DM) among people with PTSD. The review found that 10% of people with PTSD are affected by T2DM and that providers of medical and psychological services should implement screening services and offer appropriate life-style advice.

A more recent systematic review by Syed et al, (2020) found that the prevalence of mental health among police officers exceeds twice that reported in previously reported samples of first responders. This increase is due to poor social support, occupational stress, and 'maladaptive' coping strategies. The review finds that there is a substantial health concern for police officers suffering psychological difficulties where there are ineffective interventions. Indeed, the study states: 'The prevalence of PTSD and depression in police are reported to exceed twice that of the general population (20% vs 7%-9%) and are linked to poorer quality of life, elevated risk of errors, aggression, cardiac deaths, substance misuse, absenteeism, and suicide.' (p.737). Syed et al (2020) concludes that there is inadequate evidence of effective interventions resulting in a lack of consensus on what treatments and therapies should be offered; this is the crux of the matter, despite the issue having been identified over 40 years ago, police organisations have not implemented an effective response. Syed et al stated that:

'Further research into interventions that address stress and peer support in the police is needed, taking account risk differences between genders and cultures' (p.744).

A systematic review in 2021, critically analysed 17 papers relating to mental health in police officers following extreme traumatic exposures (Regehr et al, 2021). This review found that understanding this subject is critical for policy makers for the wellbeing of their workforce and that there are evident patterns within the findings. Such findings include that overall rates of PTSD in police officers are consistently *lower* than those of civilians affected by disasters and suggested that this is due to selection (or resilience) and training of police officers. In the review, Regehr et al (2021) also noted that PTSD rates continue to rise as time-elapses from the incident, with the prevalence of PTSD, depression, and anxiety in police officers being largely inconsistent across the evidence, however, women police officers are consistently reported as having higher rates than men. This review identified the need to build on crisis-oriented mental health interventions following major disasters and recommended that policing organisation arrange a wide range of support for health and mental health for police officers throughout their career.

### Theme 2: Treatment of PTSD in first responders

A systematic review paper published in 2012 by Haugen, Evces, and Weiss which focused on the treatment of PTSD in first responders, concluded that the literature was sparse and thus their recommendations for treatments could not be evidence-based. However, the paper suggested the following treatments have been found effective for PTSD: Cognitive behaviour therapy (CBT); Eye movement desensitization reprocessing (EMDR); Prolonged exposure (PE); Stress inoculation therapy (SIT). They also noted barriers to effective treatments of first responders suffering from PTSD as being: on active duty – resistance to leave duty; stigma



attached to mental health; worry about possible changes on job and pay if PTSD found; and organisational factors – organisations lack the structure to deal with PTSD. This study noted that police officers are less affected by PTSD than other first responders; they also noted the possibility of cumulative PTSD.

A meta-analytic review by Pacella et al (2013) sought to identify the physical health consequences of PTSD and PTSD symptoms. The paper lists 'General Health' over five dimensions: (1) health-related quality of life (HR-QOL); (2) Coronary-respiratory health (CR); (3) Pain (comorbid pain); (4) gastro-intestinal health (GI). Although, the symptoms listed were likely to be present with PTSD, the study suggested that more research was needed, especially longitudinal studies. In common with some other studies, the study found that females reported greater levels of PTSD than males and tended to report physical symptoms up to 50% more frequently. This finding, regarding gender difference, should be borne in mind when organisations are planning to provide responses to mitigate the effects of PTSD.

A systematic review conducted by Skeffington et al (2013) examined the treatment of PTSD prevention, arriving at findings that were highly inconclusive. Skeffington et al revealed no conclusive findings can be yielded on efficacy concerning pre-trauma psychoeducational programs for the primary prevention of PTSD. The same finding applied to pre-trauma psychoeducational and skills building programs and pre-simulation programs, despite much early evidence of the efficacy of these interventions being advocated (see the work of Alexander and Wells, 1991). The Skeffington et al study was scathing about studies they had reviewed due to the features of poor research design and inadequate sample sizes to name but a few for the limitations of existing scientific evidence/literature on the primary prevention of PTSD.

Moving to 2014, Patterson, Chung and Swan completed a meta-analysis on stress management interventions for police officers and recruits. In this work, Patterson et al reviewed 12 papers and found inconsistencies across the measurement approaches in the scientific evidence/literature and that insufficient evidence existed to demonstrate the effectiveness of stress management interventions. They suggested that more rigorous outcome evaluation studies were needed to assess the effectiveness of stress management interventions among police officers (although the review of the authors of that paper revealed limitations on the methodology approach of this study). The work of Patterson et al (2014) acknowledged four categories of stress: (1) the law enforcement organisation; (2) police work; (3) working in the criminal justice system; (4) life stressors; and the three highest ranking stressors in police work were identified as: killing someone in the line of duty; experiencing a fellow officer being killed; experiencing a physical attack. Yet, Patterson et al failed to identify an effective stress management intervention through their review, as noted: '... a well-defined and consistent approach to stress management interventions for police officers and recruits was not found' (p.510).

In 2015, Rosenbaum et al, through their systematic review and meta-analysis sought to examine if physical activity was an effective treatment for PTSD. This study involved 200 participants across four studies and identified that people suffering from PTSD have double the risk of metabolic syndrome and obesity than the general population. Rosenbaum et al, through the review found the empirical evidence 'encouraging' and also noted the evidence

that physical exercise also, significantly, reduced depressive symptoms, however optimal length of duration and frequency of exercise to engender such benefits were not evidenced. The paper recommended that people who suffered with PTSD should engage in both resistance training and/or yoga-based exercises.

The treatment of PTSD was the focus of Cusack et al (2016) study, in which a systematic review and meta-analysis was carried out to identify psychological treatments for adults with PTSD. Whilst the method used in the analysis of this paper is arguably questionable, this paper points out that there are many unanswered questions about the efficacy of different therapies and many reports have no mention of adverse effects experienced by patients. Of significance, the work of Cusack et al (2016) reveal that approximately 20% of people are left with impaired functioning after exposure to extreme traumatic events, which suggests that interventions need to be offered within a timely manner. The response time for dealing with trauma after a traumatic event was the focus of research by Birch and Cox (2019), where it was concluded that the first 20 minutes of a critical incident and 2 hours thereafter was the optimal time in which exposure to such an event was to be initially dealt with.

A systematic review and meta-analysis in 2019 by Garbarino et al examined sleep quality among police officers. Although sleep quality is not directly linked to PTSD, it is certainly related to police officers' wellbeing and the paper linked PTSD and poor sleep quality to early retirement (see Introduction). Sleep quality is affected by occupational stress and traumatic events with adverse medical outcomes such as: physical illnesses; cardiovascular; mental health; metabolic syndrome; and a significant association between bad sleep quality and mental health was observed. The Pittsburgh Sleep Quality Index (PSQI) was used in all the included studies where a cut-off point score of 5 resulted in 51% police officers had bad sleep score. Global scores of >5 are generally used to indicate poor sleep; the global police officer score was 5.6 which is higher than the general population which recorded 4.38. The paper concluded that health promotion programs focused on sleep hygiene and healthy lifestyle habits were needed to improve sleep quality for police officers.

In 2020, it was suggested some progress was made on effective interventions for psychological trauma in a systematic analysis and meta-analysis by Taylor et al. (2020). In a similar vein to that of Rosenbaum et al's (2015) review, Taylor et al (2020) suggested that mindfulness and yoga interventions showed similar positive effects, along with integrative exercise, on those affected by psychological trauma<sup>3</sup>. However, no police officers participated in the 66 studies included in the systematic review or the 25 studies in the meta-analysis. Mindfulness was also proposed in Syed et al (2020) in which 67 eligible studies involved at least 100 active police professionals; findings recommended early identification and help-seeking for psychiatric conditions, continuous health screenings and psychoeducation throughout police career. Also, police organisations should have stigma reduction strategies, and an employee-assistance program. The two papers by Taylor et al (2020) and Syed et al (2020) concluded that Mindfulness based interventions (MBIs) appear effective for different trauma types with minimal adverse effects. However, Taylor et al found

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<sup>3</sup> According to Oxford Learners Dictionary<sup>3</sup>, Mindfulness is: 'a mental state achieved by concentrating on the present moment, while calmly accepting the feelings and thoughts that come to you, used as a technique to help you relax'. Retrieved from: <https://www.oxfordlearnersdictionaries.com/>

that interventions less than 8 weeks duration were not effective, and those lasting 8-9 weeks were more effective than longer studies. Importantly, Syed et al (2020) found:

‘that the prevalence of mental health problems among police exceeds twice that previously reported in mixed samples of first responders, and is associated with poor social support, occupational stress, and maladaptive coping strategies. Without effective intervention, psychological difficulties will remain a substantial health concern among police’ (p.737).

Whilst Mindfulness, Yoga, and physical exercise has been identified as being an effective intervention for PTSD, the effect of ‘dropping out’ of such programs have seldom been considered. An international systematic review and meta-analysis by Lewis, et al (2020) examined this issue across 115 papers of randomised Controlled Trails (RCTs), in which it was noted: ‘Despite decades of research converging on support for the efficacy of psychological therapy for PTSD, we know remarkable little regarding dropout from these interventions’ (p.2). The paper listed evidence-based therapies previously mentioned such as cognitive behaviour therapies (CBT) and eye movement desensitization and reprocessing (EMDR), but also listed 33 treatment types they found during the meta-analysis (p.12). Their findings noted greater dropout rates from trauma focused treatment programs (18%) whereas those without trauma focus resulted in 14% dropout. Research on factors associated with dropout showed inconsistent findings and studies usually failed to provide information on adverse events and contained few explanations for dropout.

Under the heading of treatment of PTSD in first responders, Marshall et al (2017) pre-employment screening in the emergency services (Marshall et al, 2017). This review included 21 prospective cohort studies, with over half, the participants being police officers. However, despite the ostensible outcome identifying a ‘silver bullet’ to solve the problems in the police organisations to respond to mental wellbeing of their staff, the authors found no evidence to enhance their personnel selection of emergency services workers, they did though suggest using more dynamic measures of physiological and psychological coping skills rather than static measures for recruitment. The review found that pre-employment screening is expensive and unhelpful to screen out individuals on the basis of testing which has no or limited evidence-base for effectiveness; they went further to say that pre-screening employment tests as predictors of mental disorder are in common usage despite a lack of proven efficacy. They also found that pre-exposure levels of psychological symptoms were not helpful screening measures in terms of predicting later mental health problems, therefore, the process was not effective for the intended outcome. All mental disorders are considered in the review but the most common were identified as depression, anxiety, adjustment disorders, and PTSD; the authors also acknowledged that cumulative trauma is known to increase the risk of both depression and PTSD in the population.

### Theme 3: PTSD in police officers, other issues

A systematic review paper by Casas and Benuto (2022) examined work-related stress spill-over in first responder families – but it was revealed that there are few systematic reviews published in this area. The Casas and Benuto review examined 16 studies, seven of which involved police officer participants (n = 855 police officers out of a total of 10,918 participants = 7.8%). Nevertheless, Casa and Benuto found that family members were significantly

impacted in a number of ways, albeit notably, the outcome of domestic violence as a result of stress was not investigated as it is largely unexplored in the literature. What Casas and Benuto revealed was family members had to take on more family responsibilities as a result of stress in first responders. Not surprisingly, the review listed five recommendations for future research. Although close friends and family were identified as the main source of mental health support for first responders, and for first responders, seeking support from a professional was rarely endorsed, this was the result of the insulated culture of first responders. The review found mixed results in terms of availability, accessibility, quality, and perceived helpfulness of organisational or departmental support.

Included in this SANRA review was a systematic review paper by Laufs and Waseem (2020) that focused on best practice with regards to dealing with emergency management situations that were applicable for use by the police as a response to COVID-19. Drawing on an emergency management framework, the systematic review provides a pertinent intersection between law enforcement and public health, with many of the papers reviewed (n= 24 (out of 72)) directly related to the mental health of police officers engaged in dealing with natural and major disasters. The findings yielded from this work outlined the effects on the wellbeing and mental health of police officers was viewed through the study of major and critical incidents as a proxy. Indeed, the themes identified in this paper were: Police-community relations; the psychological and mental wellbeing of police officers; intra organisational challenges; inter-organisational collaboration, and cooperation. Therefore, its scope was considerably wider than the majority of papers assessed in the SANRA review. However, the recommendations for policing during COVID-19 in terms of mental health support which the systematic review revealed were very useful and could easily be converted into general usage for good practice. The recommendations included: (i) to institutionalise pre-crisis training policies to develop skills and competencies needed to prevent mental health problems, (ii) to facilitate communication between first responders, peers, and supervisors through supportive organisational practices, (iii) to provide appropriate interventions and treatment such as counselling services, and (iv) to dedicate resources to police officers and their families during and after COVID-19 to address their fear and anxiety.

#### Theme 4: PTSD – other issues

The first paper assessed under this final theme was by Brooks, et al (2019) who examined traumatic stress and its management in the workplace. Brooks et al highlighted that there are vastly different results across the studies reviewed regarding the levels of post-traumatic stress with mixed evidence on what kind of intervention is most successful for employees. From the review it was yielded that that managers could have a substantial influence on the resilience of their staff, and they play an important role in influencing risk factors. Through the work of Brooks et al it, it was also observed that social support is a major factor affecting post-disaster mental health.

A systematic review of rescue workers was completed by Berger et al, (2012). ‘Rescue workers’ were defined in the piece as: ‘any person who professionally or voluntarily engages in activities devoted to providing out-of-hospital cure medical care; transportation to definitive care; freeing persons or animals from danger to life or well-being in accidents, fire, bombings, floods, earthquakes, other disasters, and life-threatening conditions’ (p.1001). Some data that the review highlighted could be of general relevance, of course, such as PTSD

prevalence was much greater when dealing with a natural disaster than those dealing with a human-made disaster. Also, in common with other studies, the highest prevalence of PTSD was among ambulance personnel, police officers had the lowest. It found that the prevalence of PTSD in rescue workers in general was 10% compared to 1.3 – 3.5% in the general public, but different to other studies in this SANRA assessment, this study found no association between gender composition and the prevalence of PTSD.

Extending this examination was Golding et al, who reviewed 16 studies, out of which five were police emergency dispatch centre operatives. Of course, most of those operatives in modern police agencies are not sworn police officers, but specially trained and skilled 'civilian' police staff, nevertheless, police practitioners will quickly inform you that this is one of the positions that endures the highest stress during major and critical incidents and is also an essential role in dealing effectively with emergency incidents within the optimum timely, responsible, and safe conditions that can be applied by utilising a wide range of resources. The two main themes synthesised from their analysis relating to occupationally induced stress: (1) Organisational and operational factors due to: lack of control, physical layout, lack of control over outcomes, abusive phone calls, distressing calls, traumatic calls, but exciting and enjoyable nature of the work; (2) Interactions with others; Poor leadership, conflict not tackled. The paper identified mental health risks and a lack of longitudinal studies from which to assess the long-term welfare of staff, but they concluded the job was highly stressful and operatives suffered not only from emotional exhaustion and burnout, but also compassion fatigue, a factor directly relating to and impacting on the quality of service.

## **Discussion**

The analysis provided through the SANRA process presented in this paper reveals flaws in practices, processes, procedures, and policies in policing agencies that should be addressing the pressing and serious problem of police wellness and mental health. Indeed, it appears that conflicting advice from 'experts' in the field of psychology and psychiatry and also irreconcilable opposing organisational cultural issues make it difficult, if not impossible, for police organisations to formulate the correct strategy from which to identify the optimum organisational responses with which to address police officer wellness and mental health. This situation is despite the recorded history and knowledge of the issue which has been known about for many decades. As a consequence of the findings of the SANRA, this paper concludes by highlighting the main problems in addressing police officer wellness and mental health, those being:

- (a) lack of organisational response to adequately deal with the issue;
- (b) lack of consistency from medical/psychotherapy trials to identify successful therapies;
- (c) stigma and lack of self-help within the police workforce;
- (d) rigours of the job of policing and public expectations of service delivery.

These problems should not be regarded as exhaustive and will not therefore result in a comprehensive solution to the problem, but they may lead towards a more positive and healthy response by policing organisations with regards to police officer wellness and mental health. Indeed, readers might draw the conclusion that some police forces have left it too late to adequately resolve such workforce issues. As Otu and Otu (2022, p.1) explain: '... it is evident that our mistake is that we know what needs to be done but we keep researching the question instead of doing something about the clear answers we have arrived at.'

The SANRA process presented in this paper outlines a number of issues that relate to the lack of organisational response to adequately deal with the issue; the lack of consistency from medical/psychotherapy trials to identify successful therapies; the issue of stigma and lack of self-help within the police workforce, and finally, the rigours of the job of policing and public expectations of service delivery. Such findings imply that there is much to do to address the issue of police officer wellness and mental health despite the plethora of research that has been conducted on the issue. This has been exacerbated by the fact it has taken far too long to implement effective and efficacious methods to resolve the situation which is in a late stage of lethargy. Managers inside police organisations need to take responsibility for their sworn-in officers and role model a *genuine* caring approach towards their staff through vulnerable shared experiences in police department briefings/de-briefings (see the work of Boccher, 2022 as an example). Wholesale outsourcing of support mechanisms for police officers suffering stress and PTSD will not solve the situation and may result in further conflict within the workforce between ‘the workers’ and ‘the brass’. In order to achieve such outcomes a clear plan needs to be identified and entered into a strategy with a project plan and discrete milestones to ensure a holistic approach to the response to mental health and wellbeing of police officers. According to Syed et al (2020) such a plan should include: Early identification, help-seeking, continuous mental health screening, psychoeducation, routine peer support, mindfulness, positive peer and leader attitudes, stigma reduction. In order to support such evidence further research is needed with regards to evaluating police force plans in a bid to establish whether they include the right ‘ingredients’ so that they offer the optimum response. After all, in the words of Garbarino et al (2019:12) ‘Society as a whole has a high interest in improving the health of police officers.’

In sum, this paper yields several implications for policy and practice:

- An evidence-based approach to be adopted by policing organisations for dealing with police officer wellness;
- An improvement in police officer support and prevention of stigma towards those who are suffering from poor mental health;
- Training for police managers in dealing with police officer wellness;
- Continuous monitoring and evaluation of police organisation efficacy in dealing with police officer wellness.

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<sup>4</sup> \* = Denotes use in SANRA.

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