

S. Bell, Gareth Hopkin and A. Forrester

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**Article (Accepted version)
(Refereed)**

Original citation:

Bell, S. and Hopkin, Gareth and Forrester, A. (2018) Exposure to traumatic events and the experience of burnout, compassion fatigue and compassion satisfaction among prison mental health staff: an exploratory survey. *Issues in Mental Health Nursing*. ISSN 0161-2840
DOI: [10.1080/01612840.2018.1534911](https://doi.org/10.1080/01612840.2018.1534911)

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This version available at: <http://eprints.lse.ac.uk/90452/>

Available in LSE Research Online: October 2018

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Exposure to traumatic events and the experience of burnout, compassion fatigue and compassion satisfaction among prison mental health staff: An exploratory survey.

Bell, S.^{1^}, Hopkin, G.^{2*^}, & Forrester, A.³

² Department of Health Policy, London School of Economics and Political Science, London, UK

¹ Barnet, Enfield and Haringey Mental Health Trust, London, UK

³ Offender Health Research Network, University of Manchester, Manchester, UK

* corresponding author, g.hopkin@lse.ac.uk

^ joint first authors; listed alphabetically

Keywords: Prison; Mental Health; Nursing; Burnout; Compassion Fatigue

Acknowledgements:

We thank Angela Smith for her assistance in completing the project and each of the staff who participated for giving up their time to complete research questionnaires between shifts.

Declaration of Interest:

The authors declare no conflicts of interest.

Funding:

This research was not supported by grant funding.

Details of Version of Record

This is an Accepted Manuscript of an article published by Taylor & Francis in Issues in Mental Health Nursing, available online: <https://doi.org/10.1080/01612840.2018.1534911>

Abstract

Psychiatric morbidity is high in the prison population and prisoners with mental health problems present with complex needs. Working within the stressful prison environment and exposure to traumatic events may make prison mental health staff and correctional officers vulnerable to burnout, compassion fatigue and reduced compassion satisfaction. This issue has not previously been explored in the prison setting. In this exploratory study, 36 mental health professionals and correctional officers were recruited from a prison in England and completed a series of questionnaires on their demographic and professional characteristics, exposure to traumatic events, support from managers and colleagues and on levels of burnout, compassion fatigue and compassion satisfaction. Staff had high levels of exposure to traumatic events and the level of support provided by managers and colleagues was mixed. The majority of staff were not at high risk of burnout, compassion fatigue and reduced compassion satisfaction but higher levels of burnout, compassion fatigue and reduced compassion satisfaction were found to be associated with a range of factors including staff characteristics, exposure to traumatic events and working environment. These findings should be interpreted with the small sample size and limited power in mind and larger surveys of staff working in prison mental health settings are needed to confirm these results across a wider number of sites but nonetheless this study highlights the need for providers to consider staff's exposure to traumatic events and to promote supportive working environments.

Introduction

Psychiatric morbidity is high in prison populations across the world (Fazel & Danesh, 2002; Fazel & Seewald, 2012) and prisoners with mental illness present with a range of complex issues (Fazel, Cartwright, Norman-Nott, & Hawton, 2008). Prison mental health services are increasingly being developed to identify and treat prisoners with mental health conditions and mental health professionals and correctional officers play a vital role in supporting prisoners during their time in custody (Steiner, Butler, & Ellison, 2014). Despite the high proportion of prisoners with mental health problems and the large number of mental health professionals and correctional officers providing care to these group, few studies have examined the impact of working conditions on this group.

Providing care in the prison environment can be highly stressful and resource constraints and delays in transfer to hospital mean that prisoners with acute problems often remain in prison and cannot be optimally cared for (Forrester, Chiu, Dove, & Parrott, 2010; Harty, Jarrett, Thornicroft, & Shaw, 2012; Hopkin, Samele, Singh, & Forrester, 2016; Thomas, McCrone, & Fahy, 2009). Prison mental health professionals and correctional staff working in mental health units in prison are required to manage individuals who are at high risk for self-harm and suicide, and behaviours that are harmful to others and are exposed to a range of traumatic events in their working environment. Self-harm, suicide and assaults on staff and other prisoners are on the rise in prisons, with events at a record high in England and Wales (Ministry of Justice, 2017, 2018) and other countries, and it is important to examine both the extent of exposure to these traumatic events and whether they have detrimental impacts on staff.

Exposure to traumatic events within the prison environment may reduce professional quality of life for staff working in these conditions and burnout, compassion fatigue, and compassion satisfaction

are concepts that have been used extensively to examine these issues. Compassion fatigue has been defined as the reduction in the ability to provide empathic care and occurs in response to exposure to multiple, or even single, traumatic events (Sinclair et al., 2017; Sorenson, Bolick, Wright, & Hamilton, 2016). It is characterised by feelings of numbness, irritability, anxiety and other negative emotions and has been linked to misjudgements, error and poor care planning in clinical settings. Burnout is closely associated with compassion fatigue but is a more gradual process and occurs in response to longer term exposure to emotionally demanding situations, especially where accompanied by lack of agency in the workplace (Pines & Aronson, 1988). Both of these concepts may have a bearing on compassion satisfaction, which is defined as the satisfaction that is derived from helping others and this motivation may be reduced in the face of exposure to traumatic experiences (Sorenson et al., 2016). Prison mental health professionals and correctional officers experiencing any of the above issues may have a reduced ability to provide empathic and responsive care to prisoners which is an important aspects of improving both the clinical and working environment for prisoners and members of staff.

Previous studies of burnout, compassion fatigue and compassion satisfaction, including with community correctional staff (Rhineberger-Dunn, Mack, & Baker, 2016), correctional psychologists (Malkina-pykh, 2017) and other mental health professionals (Morse, Salyers, Rollins, Monroe-DeVita, & Pfahler, 2012), have identified variables that confer risk in a range of settings and a number of these factors are present in the prison setting (e.g. caring for traumatized individuals, lack of environmental control, role ambiguity, understaffing, and confrontations with patients). However, exposure to the factors, their impact on prison mental health staff has not been examined previously. More positively, preventative factors have also been identified and a professional environment that promotes teamwork, positive relationships and managerial support appears to be important in maintaining staff wellbeing (Sinclair et al., 2017; Sorenson et al., 2016) but again the

impact of this on mitigating the impact of exposure to traumatic events in prison and improving prison mental health staff's working lives has not been investigated.

It seems clear that prison mental health professionals and correctional officers work in environments where they are exposed to traumatic events and may be at risk of burnout, compassion fatigue and reduced compassion satisfaction, yet these issues have not previously been examined in this group of professionals. Work in other groups of professionals has identified risk and protective factors for reduced professional quality of life but again these issues have not been examined in this setting. Our exploratory study aimed to examine these three issues and to address the following questions: First, to examine prison mental health professionals and correctional officers' exposure to traumatic events in their working environment; second to assess levels of burnout, compassion fatigue and compassion satisfaction amongst prison mental health nurses and correctional officers; third, to explore whether risk and protective factors found in other settings are associated with burnout, compassion fatigue and compassion satisfaction in this setting. To our knowledge, this is the first study to examine these issues in prison mental health nurses and this study addresses an important but under-researched area of practice.

Methods

Setting

The study was conducted in a large local male remand prison in London that holds both Category B and Category C prisoners. The prison has a health care centre with space for 12 men that provides 24-hour care and is staffed both by mental health staff and dedicated prison officers and this unit works alongside a primary care mental health team and a secondary care mental health inreach team. The

prison also has a Care and Separation Unit (CSU) that accommodates prisoners away from the general prison population for disciplinary or safety reasons.

Sample

All mental health nurses and correctional officers working within the inpatient health care centre, Care and Separation Unit and secondary care mental health inreach team , were eligible for inclusion and invited to take part. Correctional officers were included in the study because in their work in mental health settings they take on a role in caring for prisoners with mental illness.

Measures

A self-report questionnaire consisted of three sections that related to information on the demographic and professional background of participants, exposure to traumatic events, organisational support, and burnout, compassion satisfaction and compassion fatigue. The questionnaires in the first two sections are not validated tools and were designed for this study and in the third, the validated Professional Quality of Life Scale (ProQOL) was used.

i. Demographic and Professional Information

Information on demographic and professional variables was collected to provide information on: age, ethnicity, marital status, religion, role type, length of tenure in professional role, length of tenure in prison environment, number of prisons worked at and current employment status.

ii. Exposure to Traumatic Events and Support

Information on whether staff had witnessed or experienced a series of traumatic events was collected, as well as how many times staff had had exposure to these events. These events were: contact with patients/prisoners expressing thoughts of suicide or self-harm, witnessing self-harm or suicide attempts, witnessing a fatal or near fatal event, being verbally abused or threatened, witnessing a colleague being assaulted, and being assaulted to the extent that medical attention was required. The questionnaire also asked about organisational and peer support and whether they felt they had the skills needed for their role.

iii. *Professional Quality of Life Scale (ProQOL)*

The Professional Quality of Life Scale (ProQOL) is a thirty item self-report questionnaire aimed at measuring burnout, compassion fatigue and compassion satisfaction in healthcare professionals. Each item is answered using a five point Likert scale from never to very often and three separate scores are obtained by summing subscale items. The questionnaire has good construct validity, scales have internal consistency (α for burnout = .75; α for compassion fatigue = .81; α for compassion satisfaction = .88) and inter-scale correlations ranging from 2% to 34% shared variance indicate that the subscales are distinct (Stamm, 2010).

The burnout scale assesses experience of hopelessness and helplessness at work, and difficulties in completing work (e.g. Item 21. I feel bogged down by the system). The compassion fatigue scale relates to exposure to others' trauma and related feelings of apprehension and fear (e.g. Item 9. I think that I might have been affected by the traumatic stress of those I help) and the compassion satisfaction scale measures pleasure derived from work and feelings of fulfilment at work (e.g. Item 3. I get satisfaction from being able to help people),

The ProQOL scores each of the subscales separately and is not validated as an overall score and as such the three subscales scores were used in analyses. There are suggested cut offs at under 22 to indicate low, between 23 and 41 to indicate average and over 42 to indicate high levels of burnout, compassion fatigue, and low levels of compassion satisfaction.

Procedure

Staff were identified from administrative records and an information sheet and set of self-report questionnaires were distributed to all eligible mental health nurses and correctional officers. Sealable envelopes were provided to allow anonymity and completed questionnaires were collected from a designated tray in relevant offices. A window of three weeks in was provided for completion of the survey to maximise recruitment and allow for annual leave and changes in shift patterns.

Analysis

Descriptive statistics were computed and proportions and means with standard deviations are reported. Bivariate analyses were used and included a linear regression analysis for the CS scale and Poisson regression analyses for the BO and CF scales as they were shown to not be normally distributed in tests of skewness. For linear regressions, coefficients are reported and for Poisson regressions incidence rate ratios (IRR) were calculated by exponentiating the coefficient. The sample size did not allow for fully adjusted multivariate analyses but overall tenure and professional role were seen as key confounders and were included as additional variables in sensitivity analyses. Including these terms did not alter the findings of bivariate analyses so are omitted here. Contractual status was not included in the analyses due to excess homogeneity. All analysis was completed using STATA Version 11 (StataCorp, 2009).

Approvals

Approval for this survey was received from the responsible mental health trust and relevant Governor within the prison.

Results

Characteristics of the Sample

Twenty-five nurses were eligible to participate and of these 21 (80%) took part. Twenty four correctional officers were eligible and 15 (64%) of these completed the measures. A total of 36 members of staff were therefore analysed. Their characteristics on a series of background and employment variables are described in Table 1.

Table 1. Characteristics of the Sample^a

	Mental Health Staff		Correctional Officers		Total	
Age (years)^b	41.14	(2.30)	39.13	(7.82)	40.31	(1.57)
Gender						
Male	9	(42.9)	12	(80.0)	21	(58.3)
Female	12	(57.1)	3	(20.0)	15	(41.7)
Ethnicity						
White	7	(33.3)	13	(86.7)	20	(55.6)
Black	14	(66.7)	1	(6.7)	15	(41.7)
Other	0	(0)	1	(6.7)	1	(2.8)
Marital Status						
Living As Married	15	(71.4)	11	(73.3)	26	(72.2)
Living Alone	6	(28.6)	4	(26.7)	10	(27.8)
Religion						
None	7	(33.3)	8	(53.3)	15	(41.7)
Christian	14	(66.7)	6	(40)	20	(55.6)
Other	0	(0)	1	(6.7)	1	(2.8)
Overall Tenure						
Less than 1 year	3	(14.3)	0	(0)	3	(8.3)
1 to 3 years	2	(9.5)	0	(0)	2	(5.6)
4 to 6 years	7	(33.3)	2	(13.3)	9	(25)
7 to 9 years	3	(14.3)	5	(33.3)	8	(22.2)
10 years +	6	(28.6)	8	(53.3)	14	(38.9)
Contractual Status						
Permanent Full Time	16	(76.2)	15	(100.0)	31	(86.1)

Permanent Part Time	1 (4.8)	0 (0)	1 (2.8)
Temporary Full Time	4 (19)	0 (0)	4 (11.1)
Number of Prisons Worked			
1	16 (76.2)	12 (80.0)	28 (77.8)
2	3 (14.3)	1 (6.7)	4 (11.1)
3+	2 (9.5)	2 (13.3)	4 (11.1)

^a Number and proportion of the sample reported unless otherwise stated

^b Mean and standard deviation reported

Exposure to Traumatic Events

All members of staff had witnessed or experienced a traumatic event and exposure and frequency was high for all events. Over half of mental health nurses and support workers (57%) had had thoughts of suicide and self-harm expressed to them over 30 times, and over half of correctional officers had had exposure to this over 50 times (53%). Most mental health nurses had witnessed self-harm or attempted suicide between one and ten times (48%) but many had witnessed this more frequently, and the majority of correctional officers had witnessed this more than 30 times (60%). The majority of respondents had witnessed between one and ten fatal or near fatal events. All correctional officers indicated that they had witnessed a fatal or near fatal event and a number of participants from both professional groups had experienced this more than 10 times (19%).

Experience of verbal abuse and threats was common with 48% of mental health staff and 80% of correctional officers indicating that they had received this over 50 times. Only one respondent had not witnessed a colleague being assaulted and exposure to this was varied in frequency. 5% of mental health staff and 20% of correctional officers had seen a colleague assaulted over 50 times and for both professions over a quarter had experienced this over 20 times. Over half of both mental health staff (57%) and correctional officers (53%) had personal experience of an assault that required medical attention during the course of their work.

Levels of Burnout, Compassion Fatigue and Compassion Satisfaction

The mean for the burnout scale was 25.31 (SD = 11.30), for the compassion fatigue scale was 21.44 (SD = 6.82) and for the compassion satisfaction scale was 35.11 (SD = 8.96). Two (6%) participants showed high levels of burnout, 18 (50%) medium levels and 16 (44%) low levels. No participants reported high levels of compassion fatigue and 13 (36%) and 23 (64%) reported medium and low levels respectively. Five (14%) participants were found to have low compassion satisfaction, 22 (61%) had medium level and nine (25%) high levels.

Mental health staff had significantly higher average total compassion satisfaction scores than correctional officers (39.05 vs. 29.60; $p < 0.001$) but no differences were found in the total burnout or compassion fatigue scores.

Organisational and Peer Support

Participants reported varying levels of organisational and peer support. Most mental health nurses indicated that they were often or always supported with emotional demands of the job (43%) whereas most correctional officers report they seldom/never received this support (40%). In both professions, line managers were seen as often or always encouraging (mental health staff, 52%; correctional officers, 68%) and supportive (mental health staff, 67%; correctional officers, 80%) but most participants reported that formal supervision only occurred sometimes (mental health staff, 38%; correctional officers, 53%), or seldom/never (mental health staff, 23.8%; correctional officers, 13%). Most mental health staff felt they were consulted about changes at work but most correctional officers thought they were seldom or never consulted (53%). The majority of respondents indicated that their colleagues helped them often or always (mental health staff, 67%;

correctional officers, 80%) and almost all felt they possessed the necessary skills for their work (mental health staff, 86%; correctional officers, 87%).

Predictors and Protective Factors for Burnout, Compassion Fatigue and Compassion Satisfaction

Higher compassion satisfaction was found to be significantly associated with black ethnicity (β : 8.87, 95%CI: 3.29,14.44; $p=0.003$) and higher self-reported levels of emotional support from colleagues (β : 5.33, 95%CI: 3.21,7.46; $p<0.001$) and regular supervision (β : 3.51, 95%CI: 1.12,5.91; $p=0.005$), encouragement (β : 3.76, 95%CI: 0.55,6.98; $p=0.023$) and consultation (β : 6.26, 95%CI: 4.07,8.46; $p<0.001$) from management as well as feeling equipped with appropriate skills for the role (β : 5.27, 95%CI: 1.23,9.33; $p=0.012$). Lower compassion satisfaction were significantly associated with living alone (β : -7.08, 95%CI: -13.49,-0.67; $p=0.032$), being employed as a correctional officers rather than a mental health nurse (β : -9.45, 95%CI: -14.75,-4.14; $p=0.001$), having worked in prisons for over 10 years (β : -11.55, 95%CI: -22.62,-0.47; $p=0.042$), and higher levels of exposure to traumatic events, particularly witnessing more than 10 or more fatal or near fatal events (β : -14.31, 95%CI: -24.06,-4.57; $p=0.005$).

Higher levels of burnout were significantly associated with being female (IRR: 1.14, 95%CI: 1.00,1.30; $p=0.048$), living alone (IRR: 1.23, 95%CI: 1.07,1.42; $p=0.003$), and experiencing a range of traumatic events with increases in burnout apparent with increasing number of events. Again witnessing 10 or more fatal events was a prominent risk factor (IRR: 1.86, 95%CI: 1.46,2.37; $p<0.001$). Lower levels of burnout were significantly associated with being religious (IRR: 0.79, 95%CI: 0.69,0.90; $p<0.001$) and high self-reported levels of line manager (IRR: 0.90, 95%CI: 0.84,0.97; $p=0.003$), regular supervision (IRR: 0.87, 95%CI: 0.83,0.92; $p<0.001$), emotional support from colleagues (IRR: 0.87, 95%CI:

0.82,0.92; $p<0.001$) and feeling they had adequate skills (IRR: 0.74, 95%CI: 0.67,0.81; $p<0.001$). The relationship between burnout and length of tenure was unclear with contradictory findings.

Lower levels of compassion fatigue were significantly associated with support (IRR: 0.92, 95%CI: 0.85,0.99; $p=0.024$) and consultation (IRR: 0.92, 95%CI: 0.85,0.98; $p=0.012$) from line managers, emotional support from colleagues (IRR: 0.93, 95%CI: 0.87,0.96; $p=0.035$) and feeling they had adequate skills (IRR: 0.88, 95%CI: 0.80,0.97; $p=0.009$). The relationship between length of tenure and number of prisons employed in was unclear with contradictory findings.

The full results of bivariate analyses of sample characteristics, exposure to traumatic events and organisational and peer support variables and total scores on the compassion satisfaction, burnout and secondary traumatic stress scales are available on request.

Discussion

As far as we know this is the first study to investigate the extent of exposure to traumatic events, the level of burnout, compassion fatigue, and compassion satisfaction in a sample of prison mental health nurses and correctional officers and whether there are risk and protective factors that can be identified. In this sample, staff had frequent exposure to highly traumatic events, where prisoners required acute support and life threatening events needed to be managed, and staff also reported experiencing extensive exposure to verbal abuse and physical assaults on themselves and colleagues. Despite the stresses of working in the prison environment, few staff reported high levels of burnout or compassion fatigue and these levels were lower than those found in other mental health settings (Morse et al., 2012). Low compassion satisfaction was found to be more prevalent. A large number of respondents did though report medium levels of burnout, compassion fatigue and compassion satisfaction and given the consistently challenging nature of the prison setting this is of

concern. A range of personal and professional factors were identified as potential risk and protective factors.

It is clear that exposure to traumatic events represents a significant occupational hazard for prison mental health nurses and correctional officers and on line with previous studies in different settings (Malkina-Pykh, 2017; Rhineberger-Dunn et al., 2016; Sinclair et al., 2017; Sorenson et al., 2016), we found that experiencing traumatic events may have a negative impact on burnout, compassion satisfaction, and compassion fatigue. Given exposure to traumatic events appears to be linked to reduced staff wellbeing, they should not be seen as acceptable and dismissed as part of working in the prison environment and efforts are needed to address aspects of the prison environment which lead to patients engaging in deliberate self-harm and suicide and being verbally and physically abusive to staff. Mental health services play a role in this through ensuring appropriate structures for the treatment of mental health problems in prison and delivering care in a respectful and dignified way, but prison systems require reform to provide conditions which minimize the likelihood of these events occurring.

In addition to attempts to reduce exposure to traumatic events, the results of this study suggest that ensuring positive working environments with appropriate management and supervision arrangements may act to reduce levels of burnout and compassion fatigue and maintain compassion satisfaction. This is consistent with review of previous literature (Sinclair et al., 2017; Sorenson et al., 2016) and highlights that, even where mental health services do not have the capacity to reduce exposure to traumatic events, they can act to support their staff before and after these experiences occur to mitigate their effect. A more committed focus on trauma informed care in correctional settings may provide a model for mental health services to provide a more flexible and responsive environment for prisoners, while also ensuring that professionals have organisational support that includes reflexive practices (Substance Abuse and Mental Health Services Administration, 2014). This

study also found that there may be key staff characteristics, like living alone and lacking social support outside of the workplace, which make them more vulnerable to burnout and lowered compassion satisfaction and managers should be mindful of this in their approach to dealing with different members of staff.

Limitations

The sample in this study was recruited from a single prison where mental health services were well established and a large group of professionals worked in a designated health care centre with management staff present. This is not representative of mental health nurses working in other sites in England and Wales and may not reflect the experience of other international prison systems. The response rate for mental health staff was high but was lower for prison officers. Reasons for non-response were not known and it was therefore not possible to examine differences between respondents and non-respondents and the latter may have lower levels of motivation or engagement with the team.

The small sample size in this study meant there were issues with power in our analyses and this impacted on analyses and how the results should be interpreted. Whilst sensitivity analyses included key confounders in multivariate analyses, there was insufficient power to conduct more comprehensive multivariate analyses with this sample which meant that the interaction between risk and protective factors could not be explored and it is possible that including the risk and protective factors found here in the same model would attenuate significant results. In addition, as multivariate analyses were not possible due to power and multiple tests were conducted, there is a possibility that significant effects through chance. Many of the results reported here were significant at the $p < 0.001$ level which would be considered significant even with a very conservative

Bonferroni adjustment for multiple tests but this possibility should still be considered especially for results with wider confidence intervals and p values close to 0.05. Finally, the design of this study prevents causal or directional judgements to be made about the association between variables and caution has been exercised with this in mind. Each of these limitations should be kept in mind when interpreting the results of the study and reinforce the need for more comprehensive work in this area.

Future Directions

This study needs to be replicated with larger samples in different countries' prison systems to confirm findings seen here and this study can provide some guidance on the design of future work. Staff are exposed to different types of traumatic events with different frequency and this should guide how questions on these events are asked and data analysed in future. It seems appropriate to use the categorical approach used here for more common events (i.e. thoughts of self-harm, verbal abuse), but for rarer events (i.e. witnessing self-harm, suicide, and fatal and near fatal events, witnessing assault on colleagues, experiencing assault) it seems more appropriate to elicit the specific number of events experience with information on the nature of the reported events.

In addition, these findings suggest that mental health services need to ensure that they are working to reduce exposure to traumatic events and ensuring that staff working in these environments have adequate support. New models of care, including trauma informed care, are needed to improve clinical and working conditions and partnerships are needed with Government and prison systems to help ensure these reforms are possible. The models have the potential to improve the lives of both prisoners and staff and both of these groups should be considered in future research in this area.

Conclusion

This exploratory study has demonstrated that exposure to traumatic events is high in prison mental health nurses and correctional officers. Line managers and peers are generally seen as helpful, supportive and encouraging, however, organisational structure do not appear to provide for emotional support and regular supervision. Despite the stresses of working in the prison environment and the scope for improvement of organisational support, high levels of burnout, compassion fatigue and diminished compassion satisfaction were not common. This study identified that exposure to traumatic events may be a predictor of burnout, compassion fatigue and diminished compassion satisfaction but that ensuring a supportive and encouraging environment may reduce the impact of exposure. The results of this exploratory study can guide wider surveys with more sites and greater power to conduct multivariate analyses.

References

- Fazel, S., Cartwright, J., Norman-Nott, A., & Hawton, K. (2008). Suicide in prisoners: a systematic review of risk factors. *J Clin Psychiatry*, *69*(11), 1721–1731.
<http://doi.org/10.4088/JCP.v69n1107>
- Fazel, S., & Danesh, J. (2002). Serious mental disorder in 23 000 prisoners: a systematic review of 62 surveys. *The Lancet*, *359*(9306), 545–550. [http://doi.org/10.1016/s0140-6736\(02\)07740-1](http://doi.org/10.1016/s0140-6736(02)07740-1)
- Fazel, S., & Seewald, K. (2012). Severe mental illness in 33 588 prisoners worldwide: Systematic review and meta-regression analysis. *British Journal of Psychiatry*, *200*(5), 364–373.
<http://doi.org/10.1192/bjp.bp.111.096370>
- Forrester, A., Chiu, K., Dove, S., & Parrott, J. (2010). Prison health-care wings: psychiatry's forgotten frontier? *Criminal Behaviour and Mental Health : CBMH*, *20*(1), 51–61.
<http://doi.org/10.1002/cbm.753>
- Harty, M., Jarrett, M., Thornicroft, G., & Shaw, J. (2012). Unmet needs of male prisoners under the

- care of prison Mental Health Inreach Services. *Journal of Forensic Psychiatry & Psychology*, 23(3), 285–296. <http://doi.org/10.1080/14789949.2012.690101>
- Hopkin, G., Samele, C., Singh, K., & Forrester, A. (2016). Letter to the editor: Transferring London's acutely mentally ill prisoners to hospital. *Criminal Behaviour and Mental Health*. <http://doi.org/10.1002/cbm.1992>
- Malkina-Pykh, I. G. (2017). Associations of Burnout , Secondary Traumatic Stress and Individual Differences among Correctional Psychologists, 18–34.
- Ministry of Justice. (2017). *Safety in custody quarterly: update to June 2017*. London.
- Ministry of Justice. (2018). *Safety in custody quarterly: update to September 2017*. London.
- Morse, G., Salyers, M. P., Rollins, A. L., Monroe-DeVita, M., & Pfahler, C. (2012). Burnout in Mental Health Services: A Review of the Problem and Its Remediation. *Administration and Policy in Mental Health and Mental Health Services Research*, 39(5), 341–352. <http://doi.org/10.1007/s10488-011-0352-1>
- Pines, A. ., & Aronson, E. (1988). *Career Burnout: Causes and Cures*. New York: Free Press.
- Rhineberger-Dunn, G., Mack, K. Y., & Baker, K. M. (2016). Secondary trauma among community corrections staff: An exploratory study. *Journal of Offender Rehabilitation*, 55(5), 293–307. <http://doi.org/10.1080/10509674.2016.1181132>
- Sinclair, S., Raffn-Bouchal, S., Venturato, L., Mijovic-Kondejewski, J., Smith-MacDonald, L., & Author, C. (2017). Compassion fatigue: A meta-narrative review of the healthcare literature, 69, 9–24. <http://doi.org/10.1016/j.ijnurstu.2017.01.003>
- Sorenson, C., Bolick, B., Wright, K., & Hamilton, R. (2016). Understanding Compassion Fatigue in Healthcare Providers: A Review of Current Literature. *Journal of Nursing Scholarship*, 48(5), 456–465. <http://doi.org/10.1111/jnu.12229>
- Stamm, B. H. (2010). *The concise ProQOL manual* (2nd ed). Pocatello, ID.
- StataCorp. (2009). *Stata Statistical Software: Release 11*. College Station, TX: StataCorp LP.
- Steiner, B., Butler, H. D., & Ellison, J. M. (2014). Causes and correlates of prison inmate misconduct:

A systematic review of the evidence. *Journal of Criminal Justice*, 42(6), 462–470.

<http://doi.org/10.1016/j.jcrimjus.2014.08.001>

Substance Abuse and Mental Health Services Administration. (2014). *Trauma-Informed Care in*

Behavioral Health. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Thomas, S., McCrone, P., & Fahy, T. (2009). How do psychiatric patients on prison healthcare centres

differ from inpatients in secure psychiatric inpatient units? *Psychology, Crime & Law*, 15(8),

729–742. <http://doi.org/10.1080/10683160802516265>