The relationship between social support and engagement in physical restraint, and their gendered effects on secondary trauma and burnout for staff working in forensic mental healthcare

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Abstract

Background: Staff working in forensic mental health settings are exposed to a range of potentially traumatic experiences which impact their wellbeing. Social support is documented as being of benefit to mental health and coping with difficult situations. The effects of physical restraint on service users is well-researched, though there is little research into it's effect on staff. This study aimed to explore the relationship between physical restraint, social support and wellbeing in staff working in secure mental healthcare. **Method:** Overall, 250 clinical staff responded to the survey, which included the Professional Quality of Life scale and explored access to social support. **Results:** Across the sample, 12% (n=30) of staff reported a lack of external social support, in line with the national average. Staff without external social support engaged in physical restraints significantly more frequently than staff with a social support network (p=.005). Lack of social support was predictive of burnout in males only. Involvement in physical restraints was predictive of burnout and secondary traumatic stress in females only. **Conclusion:** Lack of social support and involvement in restraints have differential gendered impacts on domains of wellbeing. Interventions and initiatives to improve staff wellbeing should be tailored accordingly.

Introduction

Forensic mental health services reflect a uniquely challenging work environment, with staff exposed to high levels of aggression (Bowers et al., 2011) and traumatic material (Newman et al., 2019). Working in this context has implications for staff's wellbeing, including greater risk for post-traumatic stress disorder (Rodrigues et al., 2020). As such, there has been growing interest in the sources and pathways to impairments in wellbeing for this population.

Physical restraint has a negative impact on both staff and service users', and reduction in its practice has been a priority for many years (Wilson et al., 2018). There are circumstances when physical restraint is necessary. Staff utilise restraint as a last resort, often in response to service users who present as at high risk for aggression, serious self harm and suicide (Ye et al., 2019). Physical restraint, and the sequence of responses that follow, can result in both psychological and physical trauma for staff, impacting on their wellbeing and ability to function in daily life (Hammervold et al., 2019). Nevertheless, there have been few studies exploring the impacts on healthcare professionals.

Healthcare professionals work in highly demanding roles, and social support is vital to the health and quality of life of this population (Koinis et al 2015). Besides support from colleagues, support from individuals outside of work can be particularly important in helping staff to cope and thrive in the workplace (McDonald et al., 2015).

As such, evidence would suggest that to improve our understanding the impacts of physical restraint on wellbeing, the role social support plays in this relationship is an important research question. An understanding of the effects of restrictive practices, and the mechanisms by which they occur, is crucial for informing interventions and practice changes to improve the wellbeing of healthcare staff. Given that males and females may have differential emotional responses to the use of physical restraint (Cusack et al., 2018), exploring such relationships from a gendered perspective is also important.

Study aims

The study sought to understand the relationship between social support and engagement in physical restraint in healthcare staff by exploring:

1. The relationship between social support and staff involvement in physical restraint
2. The relative associations of social support and involvement in physical restraint with secondary traumatic stress (STS) and burnout.

Methodology

Design
- This research was part of a wider study which utilised a cross-sectional survey design.

Participants
- A convenience sample of 250 clinical staff, across all services, responded to the anonymous survey.

Materials
- The survey included the Professional Quality of Life (PROQoL) scale was utilised as a measure of wellbeing

Procedures
- Paper and electronic copies of the survey were collected over a one month period, between December 2020 and January 2021.
- Data was inputted into a database for analysis.

Ethics
- Approval was sought and attained from internal clinical governance structures within the charity.

Results

1. Demographics

66.4% of the sample were female

43.6% were working in an unregistered nursing role

Other professions within the sample included registered nursing, psychology, dietetics, psychiatry, and social work.

70.4% were of a White British ethnicity

93.6% were between the ages of 21 and 60 years.

2. Relationship between social support and restraints

Across the sample, 12% (n=30) of participants did not have access to external social support. Gendered comparisons showed that the proportion of staff without external social support was higher for males (15.5%) than females (10.2%), although the association between gender and social support was not significant (*p*=.136).

Figure 1 illustrates the breakdown in the frequency of involvement in physical restraints in staff who did and did not have external social support.

A Mann-Whitney U test revealed that the average monthly involvement in physical restraints was significantly different between the two groups (U=2288.00, *p=.005),* with greater involvement in restraints by staff without an external social support network. As shown in Figure 1, discrepancy was particularly apparent in the proportion reporting involvement in 13 or more restraints each month (30% vs. 9.6%)

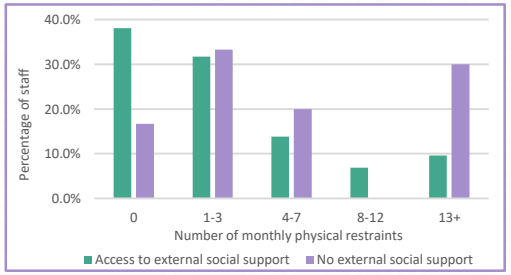

Figure 1. Frequency of monthly involvement in physical restraint between participants with and without external social support

3. Hierarchical regression analyses

A series of correlational analyses demonstrated significant associations between number of monthly physical restraints and secondary traumatic stress (STS) and burnout. Thus, hierarchical regression analyses were conducted to explore the relative effects of social support and physical restraint involvement on wellbeing. In consideration of the potential differential experiences and responses to aggression of males and females, analyses were aggregated by gender.

For males, monthly number of restraints was a significant predictor of STS at step 1 (p<.05). However, upon entry of access to external social support at step 2, neither physical restraints nor social support access were predictive of STS. Monthly number of restraints was not a significant predictor of burnout at either step. However, upon entry at step 2, access to external social support was a significant predictor of burnout (p≤.01). In summary, neither social support nor physical restraint involvement account for STS in males. Lack of social support, but not physical restraint involvement accounts for burnout in males.

For females, monthly number of restraints was a significant predictor of burnout and STS for females at step 1 (both *p*≤.01). At step 2, access to external social support did not significantly predict either burnout or STS, although monthly number of restraints remained a significant predictor. As such, the findings suggest that involvement in physical restraints, irrespective of access to external social support, accounts for burnout and STS in females.

Table 1. Summary of hierarchical regression analyses

Predictor variable	PROQOL Burnout						PROQOL Secondary Traumatic Stress					
	Male (n=84)			Female (n=166)			Male (n=84)			Female (n=166)		
	ß	*p*	ΔR^2	ß	*p*	ΔR^2	ß	*p*	ΔR^2	ß	*p*	ΔR^2
Step 1			.000			.063			.049			.061
Monthly no. of restraints	-.020	.857		.250	.002		.221	.046		.248	.002	
Step 2			.080			.003			.014			.000
Monthly no. of restraints	-.063	.564		.238	.003		.202	.071		.251	.002	
Access to external social support	-.286	.010		-.056	.484		-.121	.274		.017	.831	

Discussion

Findings highlight the differential impacts that a lack of external social support and engagement in high levels of restraint can have on staff wellbeing. The proportion of staff without external social support across the sample was in line with the national UK average (12%; ONS, 2018), although inflations were apparent in a number of services within the organisation.

Exploration of the relative associations of social support and physical restraint with wellbeing highlighted differential gendered impacts, indicating the need for differential targets in interventions. For males, improving access to social support appears important to reducing burnout. For females, reducing involvement in physical restraints appears to be an important target for reducing burnout and STS.

Clinical implications:
- Given that staff wellbeing influences service users' outcomes, introducing strategies and policies that aim to minimise involvement in high levels of restraint for *female* staff are critical.
- Organisational resources and training in clinical supervision, reflective practice and post incident debrief will also go someway to tackle the negative effects of restrictive practices.
- Incentives and strategies which support *male* staff in establishing a social network outside of the workplace, in tandem with reducing their involvement in physical restraints within the workplace, is critical in addressing the poor wellbeing of this group and interrupting the cycle of poor outcomes for both staff and service users.

Limitations and Future Directions:
- The current research reflects secondary analysis of existing data. The effects of restraint and other interventions warrants further investigation through robustly-designed quantitative and qualitative empirical research. Understanding these impacts will determine the resources and support needed to support staff and, in turn, inform better outcomes for service users.
- Due to insufficient sample size, the additional impacts of ethnicity were not explored. Further research which considers differences in the impacts of social support and restraints across gendered ethnic groups is key.
- Organisations have an important role in first identifying, and then supporting staff to access social support beyond the workplace, as well as implementing and monitoring effective staff wellbeing programs.

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