# Staff stress and burnout in a community adult mental health service

Norella Broderick<sup>1</sup>, Roisin Vaughan<sup>1</sup>, Fiona McNicholas<sup>2,3,4</sup> and Larkin Feeney<sup>1,\*</sup>

- <sup>1</sup> Cluain Mhuire Community Services, Newtownpark Avenue, Blackrock, Ireland
- <sup>2</sup> Lucena Clinic, Rathgar, Dublin 6, Ireland
- <sup>3</sup> CHI Crumlin, Dublin 12, Ireland
- <sup>4</sup> SMMS University College Dublin, Dublin, Ireland

**Objectives:** Burnout has been associated with medical errors and low levels should be considered an indicator of service quality. This study examined the level of personal, work and client-related burnout in medical, other clinical and non-clinical staff in an adult community mental health service.

**Methods:** An anonymous study-specific questionnaire was designed and circulated to all staff with an explanatory document. The Copenhagen Burnout Inventory was used as a validated measure of burnout, with high levels reflecting high rates of stress and burnout. Further questions were added from Maslach Burnout Inventory and effort–reward imbalance index. Information on demographics, job satisfaction, turnover intention, feeling valued and effort/reward balance was gathered and analysed.

**Results:** The overall response rate was 47.4% (63/133), of whom 43 were clinical staff. Overall levels of burnout were low and similar across staff type, with only 30.1% showing moderate levels of burnout, and none in the 'high-burnout' category. All staff displayed positive disposition towards patients, with lower client burnout, as compared to personal and work-related burnout. All medical staff felt valued in their work, with lower rates in the other groups (48.7% of non-medical clinicians and 58.3% of non-clinical staff).

Conclusions: Relatively low levels of overall burnout were reported among clinical and non-clinical staff working in our adult mental health service. These rates are similar to the levels identified in a national study of burnout in Irish hospital doctors but lower than the levels found among consultants in Irish child and adolescent mental health services.

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#### Introduction

The Buddhist point of view takes the function of work to be at least threefold: to give a man a chance to utilise and develop his faculties; to enable him to overcome his ego-centredness by joining with other people in a common task; and to bring forth the goods and services needed for a becoming existence . . . .

Work and leisure are complementary parts of the same living process and cannot be separated without destroying the joy of work and the bliss of leisure. (Schumacher & Porritt, 1993)

Prior to the coronavirus disease 2019 (COVID-19) pandemic, burnout in medical staff was receiving increasing attention in the national media in Ireland (Cullen, 2019; Hennessey, 2019). It has been suggested that Graham Greene was the first to introduce the term 'burnout' in

his 1961 novel, A Burnt-Out Case, about an architect 'who is the victim of an attack of indifference' (Rossler, 2012). One of the first scientific papers on the topic was by American psychiatrist Freudenberger in 1975, which described a psychological syndrome emerging in response to chronic interpersonal stressors at work. Burnout is defined by the World Health Organization in the International Classification of Disease, Version 11 (ICD-11) as an occupational phenomenon 'resulting from chronic workplace stress that has not been successfully managed' (2019). It is characterized by three dimensions:

- 1. Feelings of energy depletion or exhaustion.
- 2. Increased mental distance from one's job, or feelings of negativism or cynicism related to one's job.
- 3. Reduced professional efficacy.

Burnout has strongly been found to correlate with intention to change jobs and can have a contagious effect, leading to conflict and disruption of job tasks (Scanlan & Still, 2013). Burnout has been recognised as being detrimental to one's physical and mental

<sup>\*</sup>Address for correspondence: Dr Larkin Feeney, Cluain Mhuire Community Services, Newtownpark Avenue, Blackrock, Ireland. Email larkin.feeney@sjog.ie

health. Maslach & Leiter (2016) emphasised that emotional exhaustion predicts adverse physical and mental health outcomes. It has also been found to predict hospital admissions for cardiovascular diseases (Toppinen-Tanner *et al.* 2009) and mental health problems (Ahola & Hakanen, 2014). Of particular concern is the association of burnout with increases in medical errors, with negative consequences for patient outcomes (Motluk, 2018).

Maslach & Leiter (2016) identify six key domains of risk of developing burnout: work overload, lack of control, insufficient recognition and reward, lack of supportive relationships (community), perception of workplace decisions being unfair and disharmony of values between the individual and the organisation. Both individual factors, such as neuroticism as a trait (McManus et al. 2004), and external, such as negative life events in the past year (Rossi et al. 2012), have been associated with a higher risk of burnout. Work environments characterised by interpersonal aggression contribute to higher level of burnout (Savicki et al. 2003; Gascon et al. 2013). Factors that protect against burnout have also been identified including empathy, extraversion, increased age and greater levels of responsibility (Scanlan & Still, 2013; Maslach & Leiter, 2016). Engagement is the positive antithesis to burnout and has been divided into three components of vigour, dedication and absorption (Maslach & Leiter, 2016).

Chambers and colleagues surveyed a large cohort (n=1487) of hospital doctors and dentists in New Zealand using the Copenhagen Burnout Inventory (CBI) and found high rates of burnout, particularly among doctors in emergency medicine and psychiatry who had high mean work-related burnout (Chambers et al. 2016). Of the 197 psychiatry respondents, mean personal (49.5) and work-related (48.1) burnout were high. Heavy work demands, under-staffing, onerous on-call duties and lack of support from management were identified as the contributing factors (Chambers et al. 2016). A recent survey of over 2000 North American psychiatrists (using different study instruments) found that 78% of the respondents' scores suggested high levels of burnout (Summers et al. 2020). They found that the presence of depressive symptoms, female gender, inability to control work schedule and work setting were significantly associated with higher burnout scores.

Interest in burnout among healthcare professionals in Ireland has burgeoned as the health service has come under pressure due to increased demand, relative resource reductions and recruitment difficulties (Hennessey & Ryan, 2020). Prior to the outbreak of COVID-19, Ireland was experiencing persistent difficulties in filling consultant psychiatrist and mental health nursing positions (Houses of the Oireachtas

Joint Committee on the Future of Mental Health Care, 2018, p 32).

Some studies conducted in Ireland have also suggested high burnout rates. An Irish study of emergency department staff, both clinical and non-clinical, found that 75% met the criteria for burnout (Chernoff et al. 2019). A study of Irish interns found that 73% was burnt out (O'Connor et al. 2017). A study of 477 Irish Hospital Consultants' Association (IHCA)-affiliated consultants in 2018 found that 42% of respondents reported high levels of burnout (Margiotta et al. 2019). However, in a national study of Royal College of Physicians of Ireland-affiliated hospital doctors, Hayes et al. (2019) reported lower overall burnout rates. Just under one third (29.7%) met two or more of the Maslach burnout criteria (emotional exhaustion, depersonalisation and low personal accomplishment), with higher rates among trainees (41.8%) (Hayes et al. 2019). A recent Irish study of child psychiatrists found high levels of burnout and ambivalence about career choice (McNicholas et al. 2020).

Difficulties recruiting to psychiatry have been recognised internationally, with references to psychiatry becoming an 'endangered species' (Katschnig, 2010). Despite the workforce planning increases in post numbers, not all have been filled, bringing a focus on the barriers that deter many from pursuing this speciality. In the context of ongoing recruitment and retention difficulties in the Irish Mental health services, this study seeks to examine the levels of burnout and related factors among people working in a Dublin community mental health service. The service is a publicly funded, predominantly urban, adult community mental health service, with a catchment area population of 172 000. The service includes an outpatient department, a day hospital, an inpatient service in a nearby psychiatric hospital, 24-hour staffed rehabilitation accommodation and serviced apartments. The service also provides a liaison psychiatry team to two general hospitals within the catchment and oversees an early intervention service for psychosis detection and management. Staffing levels in the service are only half of those recommended in the national mental health policy Vision for Change (Houses of the Oireachtas Joint Committee on the Future of Mental Health Care, 2018, p 23). Unlike other studies, this study included administrative, household and other staff, all of whom make important contributions to the functioning of a mental health service.

#### Methods

An anonymous study-specific questionnaire was designed and circulated by email to all staff in November 2019 with an explanatory document. Printed versions were also left in strategic places for

staff to anonymously complete. Staff were requested to return the questionnaires to boxes left in key locations throughout the service or via internal post. The study period was closed after 4 weeks, at the end of November 2019.

Our burnout questionnaire comprised the Copenhagen Burnout Inventory (CBI) (Kristensenn et al. 2005), questions from Maslach Burnout Inventory for Human Service Workers (MBI-HSS) subscales (Maslach et al. 2001), and certain effort-reward imbalance index questions; each of these questionnaires is widely used and validated. The CBI is a 19-item tool measuring personal (6 items), work-related (7 items item 4 reverse scored) and client-related (6 items) burnout on a 5-point Likert scale. Mean subscales scores and subscale percentages are reported, using a CBI cut-off score of 50 and above (to indicate moderate and/higher burnout). As the CBI creators consider depersonalisation to be a coping strategy and reduced personal accomplishment to be a consequence of stress rather than a feature of burnout syndrome, it does not measure these domains. Information on these areas was added to our questionnaire using questions and a modified Likert scale from the MBI-HSS on depersonalisation (5 items) and personal accomplishment (8 items). The Likert scale from the MBI-HSS questionnaire was modified to mirror that used in the CBI, and the CBI cut-off scores were used. Similarly, further questions on effort-reward imbalance and overcommitment from the effort-reward imbalance index (Siegrist et al. 2009) were included in our questionnaire.

Specific study questions included information on job satisfaction, turnover intention and feeling valued (see Appendix 1). We also asked study participants to rank five suggestions for service improvement. The collected characteristics of study participants were as follows: role (medical/other clinical/non-clinical) and years of experience in adult mental health service (AMHS). We also asked about the perception of government and public attitudes to AMHSs. Ethical approval was obtained from the St John of God ethics committee. The collection of questions on specific disciplines (e.g. nurses, psychologists, occupational therapists) or other more detailed demographic information was not allowed by the ethics committee in order to minimise the chances of any respondent being identifiable.

# **Analysis**

Data were entered into SPSS for analysis (IBM, 2017). Descriptive data were calculated and Likert scale responses were compared across staff types using chi-square tests. Kolmogorov–Smirnov tests confirmed normality for total and subscale CBI scores and hence parametric analysis was carried out. Cronbach's  $\alpha$ 

was calculated for CBI subscales and indicated the reliability of each subscale. Relationships between the subscales were evaluated, using Pearson correlation coefficients. Analysis of variance was carried out between staff groups for total and subscale CBI scores. Correlations between total burnout and risk/associated factors, and among associated factors, were calculated using two-tailed Spearman correlation coefficient for non-parametric data. Similarly, correlations between total burnout and study-specific questions were calculated using Spearman's coefficient.

#### Results

#### **Demographics**

Sixty-three (63) responses were received from the staff of 133 employees, which involves a response rate of 47.4%. One fifth of the respondents identified themselves as doctors (n = 13, 20.6%), almost half as other clinical staff (n = 30, 47.6%), one fifth as non-clinical (n = 12, 19%) and 8 (12.7%) staff did not identify their area of work. About a fifth of respondents had less than 5 years' experience (n = 12, 19%), and almost a quarter had 5–10 years' experience (n = 15, 23%); while the majority had greater than 10 years' experience (n = 34, 54%), and two staff members (3.2%) did not specify their length of experience.

## Burnout

Cronbach's  $\alpha$  measured for total CBI scores was 0.89, indicating good internal consistency. As measured by the CBI, almost one third (30.8%) of doctors reported moderate or higher levels of burnout, with the remainder scoring low on the overall burnout. Similarly 30% of other clinical staff report moderate burnout with the remainder scoring low. One quarter (25%) of nonclinical staff reported moderate burnout; and 37.5% who did not specify their occupation scored moderate on total burnout. The majority of staff (44 or 69.8%) scored 'low' for total burnout with just under one third (30.2%) scoring in the 'moderate' range and no staff scoring 'high' or 'severe' for total burnout. Although not statistically significant, non-clinical workers had higher mean total work-related and personal burnout scores than either the medical and non-medical clinicians (Table 1). Examining the CBI subdomains suggests higher burnout rates being experienced in both personal (46%) and work-related areas (45%), while the proportion experiencing moderate levels of patient-related burnout was lower (14%)

It appears that the time for lowest burnout in our service is 5–10 years into working in psychiatry, with only 20% of those with 5–10 years' experience scoring moderate on total burnout. Higher proportions of those with

**Table 1.** Copenhagen Burnout Inventory scores (total and subscale) reported as mean and S.D., with scores for each staff type and corresponding p values (ANOVAs). The prevalence of burnout categories (no/low, moderate, high or severe) according to the CBI cut-off values are reported as percentages of the total sample

Copenhagen Burnout Inventory score	Mean burnout (S.D.) Work-related	Personal	Client related	Total burnout
Overall	43.8(16.4) [p = 0.31]	43.5(18.6) $[p = 0.98]$	27.8(16.3) [ $p = 0.48$ ]	39.8(14.2) [ <i>p</i> = 0.98]
$Doctor\ (n=13)$	39.3(15.9)	43.3(18.9)	34.9(14.7)	39.2(15.3)
Other Clinical $(n = 30)$	42.3(17.0)	43.3(18.5)	29.4(18.9)	38.4(15.01)
Non-Clinical $(n = 12)$	50.9(18.0)	45.2(22.3)	24.6(11.8)	40.2(10.3)
<i>Not specified</i> $(n = 8)$	45.9(9.6)	42.2(15.3)	30.5(12.9)	39.6(14.2)

Burnout level: no/low(<50), moderate (50-74), high (74-99); severe (100).

Table 2. Associated factor scores by profession

	Mean score (SD)		
Modified MBI subdomain/risk factor scores	Depersonalisation	Personal accomplishment	Overcommitment
Overall	17.3(13.2)	66.2(12.2)	35.8(18.3)
$Doctor\ (n=13)$	21.5(14.8)	59.3(15.3)	41.7(16.7)
Other clinical $(n = 30)$	14.0(11.0)	70.7(10.4)	29.2(17.2)
Non-clinical $(n = 12)$	15.4(8.4)	66.7(11.6)	47.9(18.5)
Not specified $(n = 8)$	25.6(19.7)	59.4(4.8)	33.3(14.8)

Burnout level: no/low(<50); moderate (50–74); high (74–99); severe (100).

<5 years' experience (25%) and with >10 years' experience (38.2%) scored in the moderate range of total burnout. The ratios of variances for CBI total and subscale scores were less than the critical ratio for our group sizes (p < 0.05). Therefore, CBI total and subscale scores did not significantly differ across professional groups in our service (Table 1).

## Personal accomplishment

Most staff members (95.2%) report moderate or high levels of personal accomplishment. This seems to peak after a few years of working in psychiatry, with those with 5–10 years' experience having the largest proportion (40%), with a 'high' sense of personal accomplishment. It does not seem to vary substantially across disciplines within the service (Table 2).

Total burnout negatively and significantly correlated with personal accomplishment (-0.407, p < 0.001) (Table 3).

Personal accomplishment did not correlate significantly with presenteeism or overcommitment (Table 3).

#### Depersonalisation

Low levels of depersonalisation (and of client-related burnout) among staff members were reported, with 93.7% of respondents recording no/low depersonalisation. All staff reported positive attitudes towards clients/patients although slightly higher levels of depersonalisation were found in medical staff with fewer years of experience; half of those with moderate depersonalisation had fewer than 5 years' experience.

Total burnout positively and significantly correlated with depersonalisation (0.404, p = 0.001). Deperson alisation did not significantly correlate with personal accomplishment, presenteeism or overcommitment (Table 3).

## Risk factors/associations

Presenteeism (attending work when ill)

Relatively high levels of presenteeism were observed in our service, with 79.4% of our staff at least sometimes attending work when they think they should have taken time off for illness (Figure 1), and this did not significantly differ across staff types  $(\chi^2(12) = 11.1, p = 0.5)$ .

Presenteeism positively and significantly correlated with total burnout (0.293, p = 0.02) and overcommitment (0.314, p = 0.012). Presenteeism did not correlate with

 Table 3. Correlation between total burnout and associated factors and among associated factors

Correlations	Total burnout	Depersonalisation	Personal Accomplishment	Presenteeism	Overcommitment
Total burnout	1.000	$0.404 (p = 0.001)^*$	$-0.408 (p < 0.001)^*$	0.293  (p = 0.020)*	$0.362 (p = 0.004)^*$
Depersonalisation	$0.404 \text{ (p} = 0.001)^*$	1.000	-0.246  (p = 0.052)	0.160 (p = 0.211)	0.287 (p = 0.022)*
Personal accomplishment	$-0.408 \text{ (p} < 0.001)^*$	-0.246 (p = 0.052)	1.000	0.002 (p = 0.989)	-0.236 (p = 0.063)
Presenteeism	$0.293 \text{ (p} = 0.020)^*$	0.160 (p = 0.211)	0.002 (p = 0.989)	1.000	$0.314 (p = 0.012)^*$
Overcommitment	$0.362 \ (p = 0.004)^*$	$0.287 \ (p = 0.022)^*$	$-0.236 \ (p = 0.063)$	$0.314 \ (p = 0.012)^*$	1.000

Spearman correlation coefficient (non-parametric data): 0=no correlation; 1 or -1=perfect correlation \*Sionificant results.

either depersonalisation or personal accomplishment (Table 3).

## Overcommitment

Staff reported low–moderate levels of overcommitment, indicating a balanced attitude towards work. No significant differences were observed between groups of different experiences, for example moderate overcommitment was observed among 33.3% of those with 5–10 years' experience and 35.3% of those with >10 years' experience. Overcommitment is higher among doctors and non-clinical staff than among other clinical staff, with 46.2% doctors and 50.0% of non-clinical staff reporting at least moderate overcommitment while only 20.0% of other clinical staff reported this.

Total burnout positively and significantly correlated with overcommitment (0.362, p = 0.004). Deperson alisation also correlated significantly with overcommitment (0.287, p = 0.022). Personal accomplishment did not significantly correlate with overcommitment (Table 3).

# Feeling valued

A statistically significant difference was observed in how valued different types of staff felt in their jobs. Specifically, all doctors felt valued but only about half of other clinical and non-clinical staff reported that they 'definitely' or 'probably' feel valued (100% v. 46.7% v. 58.3%, respectively),  $\chi^2$ (12)=24.4, p = 0.02) (see Figure 1).

No correlation/relationship was observed between total burnout (depersonalisation or personal accomplishment) and feeling valued in the job (Table 4).

Staff's perception of job satisfaction correlated negatively with total burnout (-0.323, p = 0.010) (Table 4).

#### Turnover intention

Over half of all staff (35/63; 55%) surveyed indicated that they were considering changing jobs (turnover intention) although a majority (63.5%) of staff members would definitely or probably choose to work in the area of psychiatry again. Doctors (5/13; 38%) were less likely than other clinicians (20/30; 67%) and non-clinicians (8/12; 67%) to be considering changing job. Doctors and other clinical staff members (61.5% and 66.7%, respectively) were significantly more likely than non-clinical staff (41.7%) to choose to work in psychiatry again,  $\chi^2(12)=30.1$ , p=0.003 (see Figure 1). Turnover intention positively and significantly correlated with personal burnout (0.38, p=0.002), work burnout (0.502, p=0.000) and client burnout (0.363, p=0.003) as well as with total burnout (0.500, p<0.001).

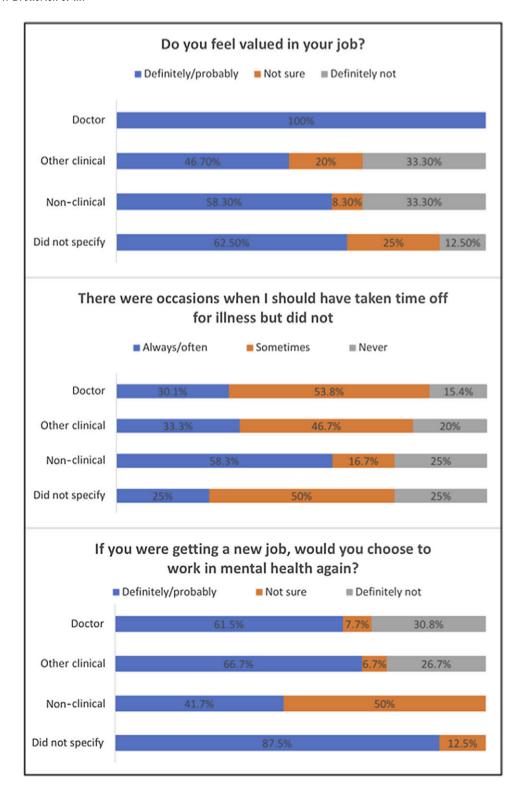


Figure 1. Likert scale responses, reported as percentages for each staff type, for selected questions on feeling valued, turnover intention and presenteeism.

**Table 4.** Correlation between study-specific questions and total burnout

Correlations	Total burnout
Feeling valued Job satisfaction	-0.214 (p = 0.093) $-0.323 (p = 0.010)^*$
Turnover intention	$0.500 \ (p < 0.001)^*$

Spearman correlation coefficient: 0=no correlation; 1 or -1=perfect correlation. \*Significant results.

Turnover intention did not correlate with either depersonalisation or personal accomplishment.

## Improvement options

Increased staffing and reduced workload received most endorsement from options to improve the quality of mental health services. Increased access to allied health professionals and increased home support received most endorsement from options to improve public perceptions of AMHSs.

#### Discussion

This study found relatively low levels of burnout in all staff types in one Irish community of AMHS. Approximately one third of staff reported moderate burnout. This is about half of the burnout levels found in a recent study of consultant child psychiatrists in Ireland, where 59.6% of the sample reported moderate or higher degrees of burnout (McNicholas *et al.* 2020).

The levels of burnout we found are also lower than those reported by other groups internationally (Chambers *et al.* 2016; Creedy *et al.* 2017).

While the staff we surveyed had a consistently positive attitude towards patients and a high level of personal accomplishment, we also found a high rate of presenteeism, indicating that staff are at an elevated risk of burnout. In our study, burnout levels seemed lowest in those with 5–10 years of experience although these differences were not statistically significant. Only 20% of those with 5–10 years' experience had moderate levels of total burnout, while higher proportions of those with <5 years' experience (25%) and with >10 years' experience (38.2%) scored in the moderate range. It is difficult to disentangle this, as longer duration in the job may bring about both more responsibilities and, in some cases, less face-to-face patient contact; it may also bring experience, competence and autonomy, all known to be linked to reduced stress. Our findings suggest that at either end, both newer entrants with less experience and those in more senior roles have higher rates of burnout.

We used two different burnout measures to achieve a greater breadth of information from respondents. Total burnout in the CBI correlated with both depersonalisation and personal accomplishment scores. However, depersonalisation and personal accomplishment correlation with risk factors and other associations was inconsistent. For example, total burnout correlated with presenteeism, but neither depersonalisation nor personal accomplishment did. Total burnout correlated with overcommitment, as did personal accomplishment, but depersonalisation did not correlate. This seems to call into question the usefulness of the concepts of depersonalisation and personal accomplishment as measures of burnout and would seem to support the position of the CBI creators that perhaps depersonalisation and personal accomplishment should be viewed separately from burnout.

Many factors have been proposed as risk and protective against burnout, even in the face of high demand. Job satisfaction, being valued and supported by management, and working in a service affiliated with an academic centre or the medical community, have been found to be protective (Morse *et al.* 2012). In our study, all doctors felt valued, but one third of the non-medical clinicians and the non-clinical staff did not feel valued. Validation has been seen as a key protective factor from burnout, and thus this is an area of concern (Gorbenko *et al.* 2020).

Almost half of respondents surveyed had considered changing jobs, with almost one third of doctors intending not to re-enter the area of mental health. This has significant ramifications on staffing levels and occurs in the context where recruitment to psychiatry has been recognised to be in a state of 'crisis', both in Ireland and in other countries (Mukherjee *et al.* 2013; Choudry & Farooq, 2017). Given this was also a finding in the survey of consultants working in child and adolescent mental health services in Ireland, where 65% had reservations about training in child psychiatry and 70% had seriously considered changing jobs in the previous 6–12 months; organisations must take heed and ensure optimum working conditions (McNicholas *et al.* 2020).

Doctors reporting burnout have been found to be over twice as likely to make medical errors (Tawfik et al. 2018). Burnout levels similar to those in our cohort were associated with significant levels of depression and anxiety in the National Study of Well-being of Hospital Doctors in Ireland (Hayes et al. 2017). Therefore, regardless of our finding of relatively low levels, attention constantly needs to be paid to minimising burnout and improving staff well-being. It has been suggested with merit that staff health should be used as a quality indicator in service audits (Wallace et al. 2009). This could encourage health services to address staff

well-being, allow measurement of the effectiveness of interventions and enable tracking of changes over time.

Finally, as per suggestions of our staff in this study, increased staffing (reducing workload) and increased access to MDT members are advised to help improve the working experience of staff and the patient experience of the public.

#### Limitations

To the authors' knowledge, this is the first study to examine the rates of burnout in an AMHS in Ireland. Furthermore, it included non-clinical staff, such as administrative and housekeeping staff, a group less often studied. The use of well-developed validated instruments, CBI, the MBI subdomain questions and the effort–reward imbalance questionnaire, to measure burnout is a strength of the study and allows for comparability with other studies. However, some of the questions were devised for this study (included in Appendix 1), and MBI responses offered a modified Likert scale and, therefore, have not been validated. Further, respondents were recruited from one AMHS and as such may not be generalizable to other services in Ireland. Despite the relatively small sample size (n = 66) and low response rate (47.4%), it is comparable to the response rates in other studies.

## Conflict of interest

NB has no conflicts of interest to disclose. RV has no conflicts of interests to disclose. FMcN has no conflicts of interests to disclose. LF has no conflicts of interests to disclose.

# Ethical standards

The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committee on human experimentation with the Helsinki Declaration of 1975, as revised in 2008. The authors assert that ethical approval for publication of this study has been provided by their local ethics committee.

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## References

Ahola K, Hakanen J (2014). Burnout and health. In Burnout at work: a psychological perspective (ed MP Leiter, AB Baker and C Maslach), pp. 10–31. Psychology Press: London.

- Chambers CNL, Frampton CMA, Barclay M, McKee M (2016). Burnout prevalence in New Zealand's public hospital senior medical workforce: a cross-sectional mixed methods study. *BMJ Open* 6, e013947. doi: 10.1136/bmjopen-2016-013947.
- Chernoff P, Adedokun C, O'Sullivan I, McManus J, Payne A (2019). Burnout in the Emergency Department hospital staff at Cork University Hospital. *Irish Journal of Medical Science* **188**, 667–674.
- Choudry A, Farooq S (2017). Systematic review into factors associated with the recruitment crisis in psychiatry in the UK: Students', trainees' and consultants' views. *BJPsych Bulletin*, **41**, 345.
- Creedy DK, Sidebotham M, Gamble J, Pallant J, Fenwick J (2017). Prevalence of burnout, depression, anxiety and stress in Australian midwives: a cross-sectional survey. *BMC Pregnancy Childbirth* 17, 13. doi: 10.1186/s12884-016-1212-5.
- Cullen P (2019). Half of Ireland's Hospital Doctors exhausted and overwhelmed by work. Irish Times, March 13<sup>th</sup>, 2019. Available from "https://www.irishtimes.com/news/health/half-of-ireland-s-hospital-doctors-exhausted-and-overwhelmed-by-work-1.3823488#:":text=Half%20of% 20Irish%20hospital%20doctors,more%20than%201%2C700% 20doctors%20shows
- **Freudenberger H** (1975). The staff burnout syndrome is alternative institutions. *Psychotherapy: Theory, Research & Practice* **12**, 73–82.
- Gascon S, Leiter MP, Andres E, Santed MA, Pereira JP, Cunha MJ, Albesa A, Montero-Marín J, García-Campayo J, Martínez-Jarreta B (2013). The role of aggression suffered by healthcare workers as predictors of burnout. *Journal of Clinical Nursing* 22, 3120–3129. https://doi.org/10.1111/j.1365-2702.2012.04255.x.
- Gorbenko K, Mendelev E, Keefer L (2020). Can multidisciplinary team meetings reduce burnout? *Journal of Evaluation in Clinical Practice* **26**: 863–865. https://doi.org/10.1111/jep.13234.
- Hayes B, Prihodova L, Walsh G, Doyle F, Doherty S (2019). Doctors don't Do-little: a national cross-sectional study of workplace well-being of hospital doctors in Ireland. *BMJ Open* 9, e025433. doi: 10.1136/bmjopen-2018-025433.
- Hayes B, Walsh G, Prihodova L (2017). National Study of Wellbeing of Hospital Doctors in Ireland. Royal College of Physicians of Ireland. Available from: https://rcpi-livecdn.s3.amazonaws.com/wp-content/uploads/2017/05/ Wellbeing-Report-web.pdf
- Hennessey E (2019). 'Undermined, dismissed, ignored': Almost half of Irish doctors in survey considered leaving profession. Journal.ie, November 7<sup>th</sup>, 2019. Available from: https://www.thejournal.ie/doctor-burnout-4881619-Nov2019/
- Hennessey M, Ryan O (2020). HSE trolley crisis: Recruitment freeze is 'starving frontline services of muchneeded staff. Journal.ie, January 8<sup>th</sup>, 2020. Available from: https://www.thejournal.ie/hse-recruitment-trolleys-4956305-Jan2020/
- Houses of the Oireachtas Joint Committee on the Future of Mental Health Care (2018). Second Interim Report: Recommended actions arising from progress made to

- date. Available from: https://data.oireachtas.ie/ie/oireachtas/committee/dail/32/joint\_committee\_on\_future\_of\_mental\_health\_care/reports/2018/2018-04-26\_second-interim-report-recommended-actions-arising-from-progress-made-to-date\_en.pdf
- IBM Corporation (2017). IBM SPSS Statistics for Windows, Version 25.0. IBM Corp: Armonk, NY.
- Katschnig H (2010). Are psychiatrists an endangered species? Observations on internal and external challenges to the profession. World Psychiatry, 9, 21.
- Kristensenn TS, Borritz M, Villadsen E, Christensen KB (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. Work & Stress 19, 192–207.
- Margiotta F, Crudden G, Byrne D, Doherty AM (2019).

  Prevalence and covariates of burnout in consultant hospital doctors: burnout in consultants in Ireland Study (BICDIS) *Irish Journal of Medical Science* **188**, 355–364
- Maslach C, Leiter MP (2016). Understanding the burnout experience: recent research and its implications for psychiatry. *World Psychiatry* **15**, 103–111.
- Maslach C, Schaufeli WB, Leiter MP (2001). Job burnout. Annual Review of Psychology 52, 397–422.
- McManus IC, Keeling A, Paice E (2004). Stress, burnout and doctors' attitudes to work are determined by personality and learning style: a twelve year longitudinal study of UK medical graduates. *BMC Medicine* **2**, 29. https://doi.org/10.1186/1741-7015-2-29.
- McNicholas F, Sharma S, O'Connor C, Barrett E (2020). Burnout in consultants in child and adolescent mental health (CAMHS) in Ireland: a cross-sectional study. *BMJ Open* **10**, e030354. doi: 10.1136/bmjopen-2019-030354.
- Morse G, Salyers MP, Rollins AL, 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*, **39**, 341–352. https://doi.org/10.1007/s10488-011-0352-1.
- Motluk A (2018). Do doctors experiencing burnout make more errors? *Canadian Medical Association journal = journal de l'Association medicale canadienne*, **190**, E1216–E1217. https://doi.org/10.1503/cmaj.109-5663.
- Mukherjee K, Maier, M, Wessely S (2013). UK crisis in recruitment into psychiatric training. *The Psychiatrist*, **37**, 210–214.
- O'Connor P, Lydon S, O'Dea A, Hehir L, Offiah G, Vellinga A, Byrne D (2017). A longitudinal and

- multicentre study of burnout and error in Irish junior doctors. *Postgraduate Medical Journal* **93**, 660–664.
- Rossi A, Cetrano G, Pertile R, Rabbi L, Donisi V, Grigoletti L, Curtolo C, Tansella M, Thornicroft G, Amaddeo F (2012). Burnout, compassion fatigue, and compassion satisfaction among staff in community-based mental health services. *Psychiatry Research* 200, 933–938.
- Rossler W (2012). Stress, burnout, and job dissatisfaction in mental health workers. European Archives of Psychiatry Clinical Neuroscience 262, S65–S69.
- Savicki V, Cooler E, Fjesvold J (2003). Harassment as a predictor of job burnout in correctional officers. *Criminal Justice and Behaviour* **30**, 602–619.
- Scanlan JN, Still M (2013). Job satisfaction, burnout and turnover in occupational therapists working in mental health. Australian Occupational Therapy Journal 60, 310–318.
- Schumacher EF, Porritt J (1993). Small is Beautiful: A Study of Economics as if People Mattered. Vintage Classics. p.39 (First published 1973).
- Siegrist J, Wege N, Pühlhofer F, Wahrendorf M (2009) A short generic measure of work stress in the era of globalization: effort–reward imbalance. *International* Archives of Occupational and Environmental Health 82, 1005–1013.
- Summers RF, Gorrindo T, Hwang S, Aggarwal R, Guille C (2020) Well-being, burnout and depression among North American psychitrists: The state of our profession. American Journal of Psychiatry 177, 955–964.
- Tawfik DS, Profit J, Morgenthaler TI, Satele DV, Sinsky CA, Dyrbye LN, Tutty MA, West CP, Shanafelt TD (2018). Physician Burnout, Well-being, and Work Unit Safety Grades in Relationship to Reported Medical Errors. *Mayo Clinic Proceedings* **93**, 1571–1580.
- **Toppinen-Tanner S, Ahola K, Koskinen A, Väänänen A** (2009). Burnout predicts hospitalization for mental and cardiovascular disorders: 10-year prospective results from industrial sector. *Stress Health* **25**, 287–296.
- Wallace JE, Lemaire JB, Ghali WA (2009). Physician wellness: a missing quality indicator. The Lancet 374, 1714–1721.
- World Health Organisation (2019). Burn-out an "occupational phenomenon": International Classification of Diseases. Available from: https://www.who.int/mental\_health/evidence/burn-out/en/