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Title	Prevalence of burnout among Irish general practitioners: a cross-sectional study
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Publication Date	2016-01-23
Publication Information	O'Dea, B., O'Connor, P., Lydon, S., & Murphy, A. W. (2017). Prevalence of burnout among Irish general practitioners: a cross-sectional study. <i>Irish Journal of Medical Science</i> (1971 -), 186(2), 447-453. doi:10.1007/s11845-016-1407-9 O'Dea, B., O'Connor, P., Lydon, S., & Murphy, A. W. (2017). 'Prevalence of burnout among Irish general practitioners: a cross-sectional study'. <i>Irish Journal Of Medical Science</i> , 186 :447-453.
Publisher	Springer
Link to publisher's version	https://doi.org/10.1007/s11845-016-1407-9
Item record	http://hdl.handle.net/10379/16303
DOI	http://dx.doi.org/10.1007/s11845-016-1407-9

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PREVALENCE OF BURNOUT AMONG IRISH GENERAL PRACTITIONERS: A CROSS SECTIONAL STUDY

Cite as: O’Dea, B., O’Connor, P., Lydon, S., & Murphy, A. (2017). Prevalence of burnout among Irish General Practitioners: A cross sectional study. *Irish Journal of Medical Science*, 186, 447- 453.

Abstract

Background. Burnout constitutes a significant problem among physicians which impacts negatively upon both the doctor and their patients. Previous research has indicated that burnout is prevalent among primary care physicians in other European countries and North America. However, there is a paucity of research assessing burnout among Irish general practitioners and examining predictive factors.

Aims. To report the findings of a survey of burnout among Irish general practitioners, and assess variables related to burnout in this population.

Methods. An online, anonymous, questionnaire was distributed to general practitioners working in the Republic of Ireland.

Results. In total, 683 general practitioners (27.3% of practicing Irish general practitioners) completed the survey. Of these, 52.7% reported high levels of emotional exhaustion, 31.6% scored high on depersonalisation and 16.3% presented with low levels of personal accomplishment. In total, 6.6% presented with all three symptoms, fulfilling the criteria for burnout. Emotional exhaustion was higher among this sample than reported in European and UK studies of burnout in general practitioners. Personal accomplishment was however higher in this sample than in other studies. Multiple regression analyses revealed that younger age, non-principal status role, and male gender were related to increased risk of burnout symptoms.

Conclusions. The symptoms of burnout appear prevalent among Irish general practitioners. This is likely to have a detrimental impact both upon the individual general practitioners and the patients that they serve. Research investigating the factors contributing to burnout in this population, and evaluating interventions to improve general practitioner wellbeing, is therefore essential.

INTRODUCTION

Burnout is a psychological syndrome resulting from chronic work-related stress that is characterised by high levels of emotional exhaustion, or chronic feelings of emotional and physical strain, high levels of depersonalisation, manifested as feelings of detachment from, and unempathetic attitudes towards, others such as patients, and low personal accomplishment, or poor feelings of self-efficacy [1]. Burnout has been shown to impact negatively on job performance (i.e., absenteeism, intention to change job, turnover, productivity and effectiveness), mental health, and physical health [1, 2].

Medical doctors appear particularly vulnerable to experiencing burnout. A US-based research study found that doctors were significantly more likely to experience symptoms of burnout and job dissatisfaction than any other professional group [3]. Studies of burnout prevalence among physicians have led researchers to estimate that, at any given time, one in three doctors is experiencing burnout [4]. However, levels of burnout have been shown to vary between medical specialties.

General practitioners have been found to have a higher incidence of burnout than doctors in other specialities such as cancer physicians, surgeons, paediatricians, pathologists and psychiatrists [3, 5]. A research study [6] examining the prevalence of

burnout symptoms across 1,393 primary care physicians in 12 European countries found that 43% of respondents scored high on emotional exhaustion, 35% scored high on depersonalisation, and 32% scored low on personal accomplishment. Among general practitioners, identified predictors of burnout include factors such as older age [6, 7, 8], gender [6, 7], perceived poor opportunities for continuing medical education [5, 7], increased workload [5], and public type of employment [5].

High levels of burnout have negative implications for both doctors and their patients. For doctors, burnout has been linked to elevated rates of depression and suicide [9, 10]; reduced quality of life [10]; increased absenteeism and turnover [11]; and increased smoking, alcohol consumption and psychotropic medication usage [6]. Furthermore, burnout has been shown to negatively impact upon patient safety and quality of care. Burnout has been linked to a reduced quality of, or suboptimal, patient care [12, 13]; increased medical errors [10, 13]; poorer patient outcomes including longer recovery times and reduced patient satisfaction [14]; reduced empathy for patients [15]; poorer interactions with patients [16]; and unprofessional conduct [17].

Although burnout has been investigated extensively internationally, this research has tended to focus on hospital-based doctors. There is also a paucity of research assessing burnout among Irish physicians. The aims of the current study were:

- to identify the prevalence of burnout among a sample of Irish general practitioners;
- to identify whether there are differences in levels of burnout based upon specific predictor variables that have been shown to moderate levels of burnout in other studies (age, gender, seniority, and practice setting); and

- to compare the levels of burnout observed among our sample of Irish general practitioners with levels of burnout found in general practitioner populations in the UK [18], mainland Europe [6], and North America [19].

METHOD

Procedure

Ethical approval was received from the Research Ethics Committee of the Irish College of General Practitioners. Following this, an online, anonymous questionnaire was distributed to general practitioners through Gorillasurvey™, a primary care survey provider with 1,145 registered Irish clinicians. Gorillasurvey™ requires individuals to have an Irish Medical Council registration number to take part in surveys, thereby preventing multiple or inappropriate responses. Participants were entered into a prize draw upon completion of the questionnaire.

Instrument

The questionnaire consisted of the Maslach Burnout Inventory- Human Services Survey (MBI-HSS) [20] accompanied by items seeking demographic information (i.e., gender, age, practice type, seniority). The MBI-HSS is a 22-item measure of burnout intended for use with individuals working in human services that has been demonstrated to have acceptable psychometric properties [1]. The survey consists of three subscales: Emotional Exhaustion (nine items), Depersonalisation (eight items), and Personal Achievement (five items). Participants indicate the frequency with which they have certain feelings about their work using a seven point rating scale

which ranges from 0 (Never) to 6 (Every day). Norms and cut-off scores are available [20] for each of the subscales so that participants can be classified as scoring low, average, or high on each dimension. Burnout is considered to be present when an individual presents with high levels of emotional exhaustion and depersonalisation in combination with low levels of personal accomplishment [20].

Data Analysis

Initially, subscale scores were calculated in order to determine means and standard deviations of scores on each subscale and to identify the number of participants scoring “high” on each of the subscales or meeting the criteria for burnout. Next, a series of three regressions were conducted to examine whether demographic variables were predictive of burnout symptoms among our sample. These multiple regressions were carried out with gender (male, female), practice (rural, mixed, urban), seniority/role (principal, assistant, general practitioner trainee, locum), and age (<40, 41-55, 56-70) as the independent variables. Emotional exhaustion, depersonalisation and personal accomplishment were each used in turn as the criterion variable.

RESULTS

Participants

A total of 683 general practitioners responded to the questionnaire (representing 60% of the Gorillasurvey™ panel) and 27.3% of practicing Irish general practitioners [21]). Of these respondents, 343 were male (50.2%) and 340 were female (49.8%). The majority of respondents were aged between 41 and 55 years ($n=263$; 38.5%), followed by those aged under 40 years ($n=261$; 38.2%), and those aged between 56 and 70 years ($n=159$; 23.3%). Participants were primarily the principal general

practitioner in their practice ($n=457$; 66.9%) or an assistant general practitioner ($n=146$; 21.4%), although trainee general practitioners ($n=51$; 7.5%) and locum general practitioners ($n=29$; 4.2%) also participated. Most participants worked in practices based in urban settings ($n=278$; 40.7%), 141 participants (20.6%) worked in a rural setting and 264 participants (38.7%) were based in a mixed setting.

Participants' mean score on the emotional exhaustion subscale was 28.0 (SD=12.4, range=0-54), 9.7 (SD=6.7; range=0-30) on the depersonalisation subscale, and 38.0 (SD=6.3; range= 1848) on the personal accomplishment subscale. Examining these responses in more detail revealed that 360 participants (52.7%) were experiencing high levels of emotional exhaustion, 216 participants (31.6%) reported high levels of depersonalisation, and 111 participants (16.3% reported) reported low levels of personal accomplishment. In total, 45 participants (6.6%) met the criteria for burnout (i.e., high emotional exhaustion, high depersonalisation, and low personal accomplishment). A comparison between our sample's scores on the MBI-HSS and those reported by previous studies of general practitioners in the UK [18], Europe [6], and North America [19] is presented in Table 1.

Table 1. Comparison of Maslach Burnout Inventory- Human Services Survey scores among our sample and those reported by other studies assessing burnout among general practitioners in other countries.

Study	Number of participants	Role	Location	High EE %	High DP %	Low PA %
The Current Study	683	General Practitioners	Republic of Ireland	52.7	31.6	16.3
Orton et al. [18]	564	General Practitioners	UK	46	42	34
Soler et al. [6]	1393	General Practitioners	12 European countries	43	35	32

Lee et al. [19]	123	Family physicians	Canada	47.9	46.3	17.4
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Note. EE, Emotional Exhaustion; DP, Depersonalisation; PA, Personal Accomplishment.

The four predictor multiple regression model (i.e., gender, practice setting, seniority/role, and age) was found to account for 4.5% of the variance in the emotional exhaustion score ($F(8,674)= 3.98, p<.001$). As can be seen in Table 2, the emotional exhaustion score for assistant general practitioners and trainees was significantly lower than principal general practitioners. Also, general practitioners aged 56-70 years had significantly lower emotional exhaustion scores than those aged less than 40. When controlling for the other variables, neither gender nor practice location were found to have an impact on emotional exhaustion.

Table 2. Outcomes of Multiple Regression Analysis for Emotional Exhaustion.

Variable	B	Standard Error	β
(Constant)	3.202	.142	
Gender	-.034	.112	-.012
Practice Location (urban vs mixed)	.202	.117	.071
Practice Location (urban vs rural)	.262	.143	.077
Seniority/role (principal general practitioner vs assistant general practitioner)	-.372	.148	-.110*
Seniority/role (principal general practitioner vs trainee general practitioner)	-.804	.224	-.153***
Seniority/role (principal general practitioner vs locum general practitioner)	-.167	.266	-.024
Age (<40 years vs 41-55 years)	.091	.135	.032
Age (<40 years vs 56-70 years)	-.404	.162	-.124*

Note. * significant at $p \leq .05$, ** significant at $p \leq .01$, ***significant at $p \leq .001$

The four predictor model was found to account for 3.7% of the variance in the depersonalisation score ($F(8,674) = 3.28, p < .001$). As can be seen from Table 3, male general practitioners had significantly higher depersonalisation scores than female general practitioners. General practitioners aged under the age of 40 years had significantly higher depersonalisation scores than general practitioners over 70 years old.

Table 3. Outcomes of Multiple Regression Analysis for Depersonalisation.

Variable	B	Standard Error	β
(Constant)	2.093	.138	
Gender	-.261	.109	-.097*
Practice Location (urban vs mixed)	.155	.114	.056
Practice Location (urban vs rural)	.182	.140	.055
Seniority/role (principal general practitioner vs assistant general practitioner)	-.033	.145	-.010
Seniority/role (principal general practitioner vs trainee general practitioner)	.089	.218	.018
Seniority/role (principal general practitioner vs locum general practitioner)	.129	.259	.019
Age (<40 years vs 41-55 years)	.021	.132	.008
Age (<40 years vs 56-70 years)	-.590	.158	-.186***

Note. * significant at $p \leq .05$, ** significant at $p \leq .01$, ***significant at $p \leq .001$

The four predictor model did not explain a significant proportion of the variance in personal accomplishment ($F(8,674)= 0.63, n.s.$) nor were any of the individual predictor variables significant for personal accomplishment.

DISCUSSION

The primary aim of the current study was to examine the prevalence of burnout in a sample of Irish general practitioners. Our results suggest that the symptoms of burnout are relatively common in this population, with over half of the sample reporting a high level of emotional exhaustion and almost a third reporting a high level of depersonalisation. However, a smaller proportion of the Irish general practitioners reported low feelings of professional competence or personal accomplishment than has been found in other studies conducted in the UK and Europe [6,18,19]. Predictors of burnout symptoms identified included younger age, non-principal status, and male gender, and may offer guidance for conducting interventions to improve the wellbeing of general practitioners.

The comparison of our findings with the results from studies of burnout among UK [18], European [6], and North American [19] general practitioners revealed that Irish doctors appeared to experience comparatively higher levels of emotional exhaustion, marginally lesser depersonalisation, and greater feelings of personal accomplishment than their international counterparts. This is perhaps surprising as it might be anticipated that the higher levels of emotional exhaustion would be associated with higher depersonalisation and lower personal accomplishment. It appears that, in spite of high stress and emotional exhaustion, Irish general practitioners are still able to

derive satisfaction from their work and to feel efficacious, and that patients are less likely to receive substandard care [18].

These findings also raise questions regarding levels of resilience among Irish general practitioners that may have shielded them from the detrimental effects of work stress on interactions with, or perceptions of, patients and feelings of personal efficacy. Research conducted among physicians [22] has implicated a number of factors in resilience such as feelings of satisfactions associated with work (e.g., gratification resulting from patient interactions or medical efficacy), engagement in specific protective practices (e.g., leisure time, contact with colleagues, time with family and friends, personal reflection, setting of boundaries, limitation of working hours etc.), and specific attitudes (e.g., acceptance and realism, appreciating the positive things).

It is possible that the education or training of Irish general practitioners has promoted greater resilience in this population. However, it is more likely that contextual factors associated with working in general practice in the different countries differ and that these contribute to the greater feelings of personal accomplishment and lower feelings of depersonalisation observed in our sample. Factors predictive of burnout that may vary from country to country include opportunities for continuing medical education [5,7], workload [5], and type of employment (i.e., public or private) [5] and impact upon the experience of burnout symptoms in this way. For example, prior research has suggested that working in a public practice is associated with lower personal accomplishment [5]. As Irish general practitioners typically work in mixed public and private practices it is possible that the greater independence and autonomy associated with private practice confers upon them greater feelings of personal accomplishment than their peers working in state practices in other countries. Future research which contributes to our understanding of resilience and factors associated with personal

accomplishment among Irish general practitioners would be of much use in facilitating understanding and the development of strategies to promote these feelings among general practitioners both in Ireland and internationally.

Recommendations for Interventions

The high prevalence of burnout symptoms among our sample highlights the need for investigation, or implementation, of interventions to improve general practitioner wellbeing or strategies to reduce the work pressures of general practitioners in Irish settings. Stress management interventions provide a framework for both individual and organisational involvement in minimising stressful events and reactions.

Primary prevention. Primary prevention is concerned with an organisation taking actions to modify or eliminate sources of stress that are intrinsic to the work environment [23]. The UK's Royal College of General Practitioners have recently published a consultation paper [24] that seeks to explore methods of reducing fatigue and burnout among general practitioners with the specific aim of reducing the threat posed to patient safety by impaired general practitioner wellbeing. The RCGP's proposals for exploration include the imposition of frequent, obligatory breaks for general practitioners, the development of a procedure for identifying general practices with excessive workloads and means of reducing these work pressures, and an examination of means for reducing unnecessary workload (e.g., bureaucratic and administrative tasks) and work pressures.

Secondary prevention. This level of prevention is concerned with improving the prompt detection and management of stress and burnout. Secondary prevention interventions generally takes the form of stress education and stress management training [23] and is the focus of most of the discussion on reducing burnout in general

practitioners. A range of alternative intervention strategies targeting burnout among health professionals have also been investigated [25, 26, 27] such as psychosocial skills and communication training, multidisciplinary work shift evaluations as a means of improving team communication, cognitive behavioural training, counselling, and training in coping skills. However, although most interventions yielded improvements in burnout, these improvements do not persist over time [25].

Tertiary prevention. Tertiary measures are concerned with the treatment, rehabilitation, and recovery of individuals who have suffered, or are suffering, from ill-health as a result of stress and burnout [23]. Interventions at this level tend to involve the provision of counselling services for work or personal problems. For example, a Norwegian study [28] evaluated the efficacy of individual and group counselling programmes for stressed doctors. A one-year follow-up identified significant reductions in emotional exhaustion, improvements in protective work practices (i.e., reductions in working hours), and reductions in the number of doctors on sick leave. The Irish College of General Practitioners has a confidential helpline that allows access to an employee assistance programme. However, greater investment in employee assistance programs for Irish doctors may warrant further consideration; such services have been shown to yield a return on investment of between 3:1 and 15:1 by reducing the direct and indirect costs of stress in the workplace [23].

Wallace and colleagues [30] have put forward an empirically-based interventional model that addressed primary, secondary, and tertiary prevention of burnout. This model emphasises the importance of informing doctors about burnout and its impacts on the individual doctor and their patients, educating them on the workplace stressors (e.g., workload, emotional interactions, cognitive demands), contextual factors (e.g.,

culture of medical practice and associated lack of focus on personal wellbeing, lack of available resources for supporting physician wellbeing), and personal characteristics (e.g., personality traits, coping style, neglect of self-care) that contribute to symptoms of burnout, and teaching them practical skills to reduce their likelihood of experiencing burnout. The results of the current study, and previous research studies on this topic [5, 6, 7, 8], regarding the demographic or other characteristics of general practitioners who are at high-risk of experiencing emotional exhaustion, depersonalisation, or feelings of low personal accomplishment, may help guide the focus of such interventions or indicate the characteristics of general practitioners that should be included in research studies evaluating such interventions.

Limitations

The current study, employing a well-validated measure of burnout, offers an insight into burnout prevalence among more than a quarter of practicing general practitioners in Ireland [21]. However, in spite of these strengths, there are also limitations that should be considered when interpreting study outcomes. It is possible that our results may have been impacted by a participant self-selection bias whereby doctors who chose to participate may not be representative of the population as a whole. For example, it is possible that doctors experiencing high levels of stress or burnout were more interested in the research topic and more likely to participate than doctors experiencing low levels of stress or that doctors experiencing lower levels of stress were more likely to participate as they were under less pressure or experiencing less distress. Such possibilities are difficult to confirm or refute without larger scale investigations. However, the variance in participants' demographic characteristics, and the large sample size, reduce this possibility. Further the reliance on participant self-report may also be considered a limitation of this study. The study outcomes may

have differed were a more objective measurement system employed. However, the MBI-HSS is the most commonly used and well-validated measure of burnout in existence and is considered the “gold standard” for measuring burnout among occupational groups [31]. It was also not possible to make any statistical comparison between the Irish sample of general practitioners and the international studies. This was because insufficient data were provided in the international studies to allow for more than a descriptive comparison to be made.

Future Research

This study also suggests a number of directions for future research on this topic. While our study established the prevalence of burnout among Irish general practitioners, it did not examine causal factors of burnout in this population. Future research must therefore seek to investigate and determine factors that impact upon stress and burnout among general practitioners. An investigation of such variables, and Ireland-specific factors such as recent cuts in state funding as a result of the Financial Emergency in the Public Interest Act, may yield data that better guides interventions for, or strategies to improve, general practitioner wellbeing. Given the high prevalence of burnout symptoms observed in the present study, research examining the potential impact of burnout on general practitioner work performance and the standard of patient care delivered would also be of use.

CONCLUSIONS

Physician wellbeing has been described as a key quality indicator for healthcare systems [30], impacting hugely on the standard of patient care delivered. It is apparent from the results of this research study that the symptoms of burnout are prevalent among Irish general practitioners and may be negatively impacting on the quality of

care that their patients receive. It is therefore imperative that causal factors be investigated and that interventions to improve wellbeing among Irish general practitioners be deployed on a national level.

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