
Qualitative Research

Strategies to improve general practitioner well-being: findings from a focus group study

Louise H Hall^{a,b,*}, Judith Johnson^{a,b}, Jane Heyhoe^b,
Ian Watt^c, Kevin Anderson^{d,e} and Daryl B O'Connor^a

^aSchool of Psychology, University of Leeds, Leeds, UK, ^bYorkshire Quality and Safety Research Group, Bradford Institute for Health Research, Bradford Royal Infirmary, Bradford, UK, ^cDepartment of Health Sciences, University of York, York, UK, ^dHaxby Group Surgeries, Hull, UK and ^eHull York Medical School, York, UK.

*Correspondence to Louise H. Hall, School of Psychology, University of Leeds, Lifton Place, Leeds LS2 9JT, UK; E-mail: L.H.Hall13@leeds.ac.uk

Abstract

Background. Primary care physicians are particularly prone to high levels of burnout and poor well-being. Despite this, no qualitative studies have specifically investigated the best ways to improve well-being and prevent burnout in primary care physicians. Previous interventions within primary care have been person-oriented and mainly focused on mindfulness, but there has been no prior research on whether general practitioners (GPs) deem this to be the best approach.

Objectives. To explore strategies that could improve GP well-being and reduce or prevent burnout, based on GP perceptions of the workplace factors that affect their levels of well-being and burnout.

Methods. Five focus groups were conducted, with 25 GPs (locums, salaried, trainees, and partners) in the UK, between September 2015 and February 2016. Focus groups took place in GP practices and private meeting rooms. Discussions were centered on the workplace factors that they perceived to influence their well-being, along with strategies that they use either personally, or as a practice, to try and prevent burnout. Furthermore, strategies that could feasibly be implemented by individuals and practices to improve well-being, as well as changes that are needed by groups or organizations that are external to their practice (e.g., the government) to improve the working conditions, were explored. Thematic analysis was conducted on the transcripts.

Results. Based on the contributors to burnout and workplace well-being that the participants identified, the following feasible strategies were suggested: compulsory daily coffee breaks, increasing self- and organizational awareness of the risks of burnout and mentoring or buddy systems. System-level organizational changes were voiced as vital, however, to improve the well-being of all primary care physicians. Increasing resources seemed to be the ideal solution, to allow for more administrative staff and GPs.

Conclusion. These strategies merit further consideration by researchers, physicians, healthcare organizations and policy makers both in the UK and beyond. Failure to do so may result in healthcare staff becoming even more burntout, potentially leading to a loss of doctors from the workforce.

Key words: Depression, health services research, mental health, primary care, quality of care, qualitative research/study, stress, work-related stress.

Introduction

Burnout and poor mental well-being in healthcare professionals are rising internationally (1–3). Burnout, ‘a state of vital exhaustion’ (4) can be characterized by feelings of emotional exhaustion, depersonalization and reduced personal accomplishment (5). Well-being is a broader concept, with clinicians often viewing it as a spectrum from low to high (6). Low well-being includes symptoms or diagnoses of depression and/or anxiety, and high well-being as feelings of happiness and flourishing (7). Primary care physicians are at high risk of these ailments (8,9). Rates of burnout in UK General Practitioners (GPs) are particularly high compared with other European countries and similar to rates within the US and Canada (10–12), leading to concerns that UK general practice is currently ‘in crisis’ (13). Negative implications of burnout and poor well-being for the individual include an unfavourable work-life balance, poorer quality of life, substance abuse and suicidality (12, 14). Implications of staff burnout and poor well-being on healthcare organizations include high staff turnover, increased sickness absence, poorer quality of care (e.g., negative attitudes towards patients and reduced patient satisfaction) and poorer patient safety outcomes (e.g., increased likelihood of making a wrong diagnosis or medication error) (15–17). All of these outcomes also cost healthcare organizations billions of pounds or dollars annually (18, 19).

Several studies have investigated the factors contributing to stress, burnout and depression within primary care physicians. They have suggested that causes include high workload, difficult patients, lack of support, and lack of control (8, 10, 20). The majority of research, however, has been survey based, lacking the depth and explanatory power that qualitative methods provide. In some instances, little justification was provided for why particular organizational variables were measured. Although one study by Fisher et al. (21) has taken a qualitative approach, they focused solely on workload stressors and strategies to deal specifically with workload. Our study aims to build upon these findings and extend them by focusing on general workplace stressors (including but not limited to workload), along with potential strategies to deal with these stressors and their effects on the individuals.

Despite similar demands amongst healthcare staff, not all practitioners experience such problems. Strategies used by resilient physicians and practices to cope with workplace demands include limiting one’s practice or reducing work hours, improving communication and team functioning, having job control and seeking peer as well as personal support (21–23). Although these strategies have been found useful, they mostly rely on the physician themselves to

ensure implementation. This requires individuals to have the relevant resources (time, support, and flexibility) to make changes to their routines. Those who are already struggling and therefore have limited resources are less able to make these amendments, keeping them trapped in a negative feedback loop.

Regarding formal interventions to reduce physician burnout, both organizational and individual approaches have been successful; however, no organizational interventions have been trialed in primary care (24). Organizational interventions are warranted so that (i) the responsibility for burnout reduction is shared between the practitioner and the organization and (ii) working conditions improve for all staff. Furthermore, many interventions simply aim to treat outcomes, without addressing the cause of the problem. As such, our aim was to explore potential strategies that GPs think could improve their well-being and reduce or prevent burnout, based on their perceptions of the workplace factors that affect their levels of well-being and burnout. To accomplish this, we took a two-part approach to meet the following objectives:

- (i) To understand which workplace factors GPs perceive to influence their levels of well-being and burnout.
- (ii) To explore strategies and changes that GPs think could improve their well-being or prevent burnout.

Methods

Participants

Five focus groups were conducted with a total of 25 practicing GPs who worked in the North of England. Each group consisted of three to six GPs. Three focus groups consisted of GPs working within the same practices, the other two consisted of locum GPs. Participant and focus group characteristics are displayed in Table 1.

Procedure

We recruited GPs via an existing network and then by a snowballing method between August 2015 and February 2016. Participants who took part in the first focus group put the researchers in contact with the practice managers in their associated practices. They also gave the researchers contact details of their personal contacts within local locum groups. Potential participants were fully informed of the topics to be discussed during the recruitment stage. LHH conducted the semi-structured focus groups either in practice premises, or at a mutually convenient alternative location. Once written informed

Table 1. Focus group characteristics

Focus group	GP surgery/ Locums	Number of partners	Patient list size	Number of participants	Sex	Job roles	Part/full-time work	Mean age (range)	Mean no. years as registered GP (range)
1	GP surgery	2	45 000	6	2M, 4F	2 trainees, 2 partners, 1 salaried, 1 unknown	3 FT, 1 PT, 2 unknown	35 (29–40) ^a	3.5 (0–11) ^a
2	Locums	–	–	4	2M, 2F	4 locums	4 PT	47 (36–57)	17.5 (4–28)
3	Locums	–	–	5	2M, 3F	5 locums	4 PT, 1FT	42.2 (34–56)	10.4 (0–28)
4	GP surgery	7	15 000	6	4M, 2F	6 partners	6 FT	46 (35–55)	17.2 (8–28)
5	GP surgery	5	11 000	4	1M, 3F	3 salaried, 1 partner	3 PT, 1FT	38.75 (33–44)	9.5 (4–17)

M, male; F, female.

^aMissing two participants’ data.

consent had been given by each participant, the questions listed in [Box 1](#) were asked, with some room for emerging discussions. The transcripts were audio-recorded and then transcribed verbatim. Focus groups lasted 45 minutes to 1.5 hours.

Analysis

Thematic analysis was conducted based on the six-phase guidelines of Braun and Clarke (25). The transcripts were coded by hand, based on inductive, semantic principles, from the first author's realist epistemological approach. All transcripts were coded by LHH, with 20% double coded by JH to provide outside insight, allow discussions about the emerging themes and guard against investigator bias. After initial coding of all the transcripts, codes were grouped into themes and subthemes. Any disagreements regarding themes were discussed with one or more additional author until a consensus was agreed. Once a thematic map had been generated, the authors revisited the entire data set to check that the themes accurately reflected the majority of the data.

Results

The focus groups were heterogeneous with regards to job position (partner, locum, etc.), but all discussed very similar themes.

Objective 1: Contributors to well-being and burnout

When discussing which workplace factors contribute to their sense of well-being and levels of burnout, two distinct themes emerged: Those that were internal to their practice and/or the individual and those that were external to their practice that they had no control over.

Internal influencers of well-being comprised *Team support*, *Variety* (within their roles, practices, or patients), *Control* (over their work environment and/or timetable) and an *Intense and unmanageable workload*. The importance of working within a supportive, interactive team was mentioned by all focus groups as particularly vital for good well-being. Those who felt like they did not receive peer support or have the time to interact with their team described how it could have very negative effects on their well-being.

Box 1. Discussion topic guide

Questions (prompts)

- How would you define well-being?
- How would you define burnout?
- What would you consider to be the main contributors to well-being at work? (*Positive and negative contributors*)
- Do you have a way to try and minimize the impact these issues have on your well-being? (*Personally, as a practice*)
- Would you say that burnout is a worry generally among doctors?
- Do you do anything to try and prevent burnout occurring?
- Are you aware of any services or coping mechanisms that could help prevent burnout?
- Do you think that burnout and/or poor well-being is increasing among doctors? (*Why? What's changed?*)
- Are you encouraged to talk about your own well-being? (*To your colleagues, professionals, family. Is it a taboo?*)
- What, in your opinion, would be the best way to improve the well-being of GPs, and prevent burnout? (*Feasible ideas, if the sky was the limit*)

External influencers of well-being were discussed in negative terms. These consisted of *Increases in pressures and workload*, *Increases in patients' expectations and complaints*, the *Negative portrayal of general practice* (in the media, by patients and the government) and a *Lack of support* (from the public, patients, the government and the media). An increase in the amount of administrative work that GPs have to do for external regulating organizations was described as adding to their workload, adding stress and taking away their time which would be better spent on direct patient care.

Objective 2: Strategies to improve well-being

Participants discussed possible strategies to improve well-being and prevent burnout in two similar themes to the first objective: Strategies that could be implemented at an individual or practice level, and changes needed at a higher, organizational or policy level.

Individual and practice-level strategies

GPs discussed strategies that fell under the following categories: *Breaks*, *Support*, *Physical needs*, *Psychological strategies*, and *Control*. There was some overlap between these subthemes, particularly between *Breaks* and *Psychological strategies* and *Physical needs*.

Breaks

Scheduling a coffee and/or lunch break into the working day was viewed as a feasible strategy that would be very beneficial to their well-being. Having the opportunity and being encouraged to leave their individual and often isolated offices, interact with their colleagues and have a short respite from work was seen as something that positively affected GPs' well-being in practices where this was already implemented, and something that those who did not get the chance to, wished they did.

M1: The coffee break in the middle of morning surgery. We try and get here and meet for a bit of rest and recuperation. ... I've definitely recognized that it is a positive factor for our well-being and therefore it's something that we need to maintain and cherish. [FG4]

Breaks served as fulfilling psychological needs by having that mental break from 'being the doctor' [M2, FG1], physical needs by having the chance to have a drink, some food, perhaps some fresh air, a toilet break and social needs through interacting with colleagues. Lunch breaks were not viewed as a realistic option that could be implemented; however, one short coffee break a day was deemed feasible. Participants voiced that even if GPs only briefly left their office to make a cup of tea and take it back to their office, this very short respite and chance of interaction could be enough to make a big change to their well-being.

Support (social, supervisory, workload and from patients)

Having social support within the practice, peer-to-peer and from both medics and nonmedics outside of their practice was found to be useful for preventing burnout. To improve support at the practice level, buddying and mentoring systems were suggested, along with regular meetings to 'check in' with how team members are doing.

F1: But I think also, looking after each other.... I think we're quite good at looking over our shoulder at the other person (...) if you see somebody's got a really full load, getting them a cup of tea, or going and seeing one of their extras, (...) is quite a positive thing about our team that we tend to do. [FG1]

A suggestion for improving support from patients was to communicate the state of the surgery with them and ask for their patience and support.

Physical needs

In addition to the physical needs within the breaks theme (food and drink), participants discussed the need to make time for exercise to support physical and psychological well-being. Exercise additionally served their social needs through team sports, and as a psychological strategy through being a form of 'escapism'.

Psychological strategies

Strategies that participants used to deal with the emotional toll of patient contact included being emotionally guarded or setting boundaries and isolating themselves. The latter approach, however, was acknowledged to be unhealthy and did indeed worsen one participant's ability to cope. Maintaining awareness of the risk of burnout was voiced as a useful strategy that some participants used. Additionally, it was mentioned that this could be implemented in practices through discussions and meetings, and externally at the training stage. It was evident that awareness was needed at the individual, practice and external levels.

F1: I agree. Self-awareness is often the key thing. I certainly wasn't taught that in a training stage. I think if trainees are taught or encouraged to be more self-aware so they know what their personal stresses are, how to manage them, how to identify them (...). I suppose that's actually resilience isn't it, it probably makes people feel more resilient because they're more aware of their limits. [FG 2]

Control

Control over how much, where, and when they worked was seen as a positive strategy that some GPs (mostly locums) used to prevent burnout. Many had chosen this manner of work specifically to prevent them from burning out. Or it was chosen as a way forward to protect their well-being after previously working full-time and suffering from burnout or depression.

External changes

Despite the positive changes that could be implemented within practices at a team or individual level, it was evident that system-level changes are needed to have a larger impact on GPs' work environment and their well-being. The need for more *Support*, a *Reduction in pressures* and an *Increase in resources*, was discussed.

Support

Participants voiced the need for support from the government, their patients, the healthcare organization as a whole and the wider public and press through a reduction in negative media portrayal. Additionally, a need for support from other services was discussed, for example, from social services, to ensure that patients only presented with medical problems and could go to social services in other instances. However, this may be an issue with (a lack of) funding and access also within those organizations.

F1: But wider support about if it's an over the counter medication that you can buy from the chemist please don't request it from your doctor'. [FG3]

Reduction in pressure

Participants stated the need for a reduction in the tasks that decrease their time that should be spent on direct patient care, such as administrative work, quality assessment exercises and additional work pushed onto them from secondary care.

F1: they [secondary care] treat us like um;

F3: yeah like can you recheck this and do that and

F1: they give us lots of menial, not menial tasks but things that they should be doing themselves they're pushing onto us all, so if they stopped doing that. [FG5]

Increase in resources

Increasing resources for primary care was seen as an ideal solution that would help us to improve all the previous factors mentioned, such as reducing pressures and enabling time for breaks. Ideally, having more GPs and funding to pay for more administrative staff would improve the well-being of the GPs and also the quality of care by enabling GPs to offer longer appointments. Increasing funding in other sectors (such as social care and mental healthcare) would also reduce the added pressure currently within primary care.

F1: So your options are you could increase funding in general practice back to the 11% it should be at, which would be a 3% or 4% rise, and that additional resource would pay for either more doctors or more staff within practices to do the things actually you don't need a doctor to do, and free up the doctors to then treat patients (...) it's better for the doctors but it's better for the patients as well. [FG3]

Additional quotes for each theme and subtheme can be found in Supplementary Tables S1–S4.

Discussion

Summary

Five focus groups of GPs discussed issues that they perceived contributed to their well-being and levels of burnout. They also considered possible strategies to improve well-being and prevent burnout. Their responses fell under two main themes: those that were internal to the individual and practice, and those that were external to themselves and their practice and therefore perceived to be outside of their direct control. Internal influencers of well-being mainly consisted of having good team support, variation within the job, job control, and unmanageable workloads. Individual and practice strategies to improve well-being and prevent burnout tied in with these. In particular, participants noted strategies to look after their physical needs (e.g., exercising), to have control (e.g., through choosing to locum), having breaks, offering support and psychological strategies such as increasing their self-awareness. External influencers of well-being were framed in negative terms and comprised perceived increases in pressure and workload, increasing patient expectations and complaints, lack of support from multiple sources and a perceived negative portrayal of general practice. External changes to improve well-being also drew a parallel with these. Increases in support from the public, patients, media and the government; reduction in pressures and increases in resources (e.g., funding) were stated as the three main external changes that would be needed to improve well-being. It is important to note that control was seen as an important contributor to well-being, and yet, the changes most likely to have a big impact on improving all GPs' well-being were mainly things outside of their control, suggesting a state of helplessness and vulnerability to burnout with primary care physicians.

There were no obvious differences between or within groups based on job role, gender or number of years working as a GP. The only difference was in the language used: focus groups with locum workers were more willing to discuss personal experiences of poor well-being or burnout, whereas groups run with colleagues in the

same practices spoke about more general workplace contributors to stress, with fewer participants sharing their personal experiences of burnout or depression. This is unsurprising given the potential stigma attached to discussing personal mental health issues in front of colleagues. However, this could also be explained by their current roles, as many of the locum workers had chosen that line of work in a concerted effort to prevent burnout, or as a way to improve their well-being after experiencing burnout or poor well-being when previously working full-time.

Previous literature

Similar contributors to well-being have previously been reported across various countries, including America, Canada and the UK (10, 20, 26, 27). Some of these factors have also been cited as reasons why UK GPs have left general practice in recent years (28). Our study complements their findings, giving further evidence for the lack of support within primary care in the UK, showing that these issues are widespread and geographically generalizable. Furthermore, our study extends these findings by shifting the focus away from strategies to deal specifically with workload, and instead offering practical recommendations for individuals and practices to implement in the workplace to prevent burnout and improve well-being generally. Additionally, our findings put forward system-level changes that are needed to improve working conditions.

Interventions

Improving self-awareness of personal stressors and signs of stress was a strategy suggested by our participants. This has been successfully trialed within healthcare staff, through mindfulness training courses, as an effective way to reduce burnout (29, 30). The GPs also discussed the need for more self-awareness and stress management coaching from their education providers during the early stages of professional training. This could encourage practitioner awareness of burnout while simultaneously encouraging a wider, organizational understanding. Additionally, participants suggested various strategies to foster peer-support. Balint groups (a group of clinicians or doctors who regularly meet to discuss their difficult patient cases in a safe and supportive environment) could be one way of increasing both peer-support while also increasing competence and are used by some physicians as a means to prevent burnout (31). The primary novel strategy suggested by the participants of this study was the need for regular coffee or lunch breaks. These were believed to help improve both physical and psychological well-being while also fostering a better team culture.

Implications

There are some practical strategies that individuals and practices can implement to reduce burnout, such as introducing compulsory coffee breaks, and mentoring or buddying systems. However, it is evident that system-level changes may also be valuable. These could include training future GPs and organizations to be aware of the signs of burnout and evaluating the impact this has on workforce well-being. The changes that are likely to have the biggest impact on well-being, however, such as increases in funding, resources and staff, are those that are the most challenging to implement.

Strengths and limitations

All participants were working within UK general practice, which challenges the representativeness and generalizability of the sample and results. However, many of the themes discussed were

of international relevance, particularly regarding the need for increases in support, resources and breaks. The primary strength of this study is the practical and feasible strategies that could be implemented within practices immediately to improve workplace well-being in the interim before organizational change can be implemented.

Conclusion

GPs identified both practice-level and organizational-level factors that influenced their well-being. They suggested that the best feasible way to reduce the negative impact of these factors on their well-being is through daily breaks. However, external changes were deemed vital to provide increases in resources to allow for more administrative staff, GPs and time for patient contact, as well as an increase in support from various sources. These factors all merit further consideration by researchers, physicians, healthcare organizations and policy makers worldwide. Failure to do so may result in the primary care workforce becoming even more burntout, depressed, and a subsequent increase in sick leave and early retirement.

Supplementary material

Supplementary material is available at *Family Practice* online.

Acknowledgements

We gratefully thank all the GPs who gave up their time to participate in this study.

Declaration

Funding: This project forms part of a PhD that is part-funded by a National Institute for Health Research grant. This paper presents independent research by the National Institute for Health Research Collaboration for Leadership in Applied Health Research and Care Yorkshire and Humber (NIHR CLAHRC YH) www.clahrc-yh.nir.ac.uk. The views and opinions expressed are those of the authors and not necessarily those of the National Health Service, the National Institute for Health Research or the Department of Health.

Ethical Approval: This study received ethical approval from the School of Psychology, University of Leeds Ethics Committee (ref #15-0075 accepted on 06/03/15) and Health Research Authority R&D approval (IRAS ref #178501). Conflict of interest: The authors declare that they have no conflict of interest.

References

1. Arigoni F, Bovier PA, Sappino A-P. Trend of burnout among Swiss doctors. *Swiss Med Wkly* 2010; 140: w13070.
2. Embriaco N, Azoulay E, Barrau K *et al*. High level of burnout in intensivists: prevalence and associated factors. *Am J Respir Crit Care Med* 2007; 175: 686-92.
3. Klein J, Grosse Frie K, Blum K, *et al*. Burnout and perceived quality of care among German clinicians in surgery. *Int J Qual Health Care* 2010; 22: 525-30.
4. World Health Organization. *International Statistical Classification of Diseases and Health Related Problems (The) ICD-10*. Geneva: World Health Organization, 2004.
5. Maslach C, Jackson SE, Leiter MP. *Maslach Burnout Inventory Manual*. Mountain View, CA: CPP, Inc., and Davies-Black, 1996.
6. Johnson J, Wood AM. Integrating positive and clinical psychology: viewing human functioning as continua from positive to negative can benefit clinical assessment, interventions and understandings of resilience. *Cognit Ther Res* 2016;1-15.

7. Dodge R, Daly AP, Huyton J, *et al.* The challenge of defining wellbeing. *Int J well-being*. 2012;2: 222–35.
8. Arigoni F, Bovier PA, Mermillod B, *et al.* Prevalence of burnout among Swiss cancer clinicians, paediatricians and general practitioners: who are most at risk? *Support Care Cancer* 2009; 17: 75–81.
9. Smith F, Goldacre MJ, Lambert TW. Adverse effects on health and wellbeing of working as a doctor: views of the UK medical graduates of 1974 and 1977 surveyed in 2014. *J R Soc Med* 2017: 0141076817697489.
10. Lee FJ, Stewart M, Brown JB. Stress, burnout, and strategies for reducing them: what's the situation among Canadian family physicians? *Can Fam Physician* 2008; 54: 234–5.
11. Shanafelt TD, Boone S, Tan L *et al.* Burnout and satisfaction with work-life balance among US physicians relative to the general US population. *Arch Intern Med* 2012; 172: 1377–85.
12. Soler JK, Yaman H, Esteva M *et al.*; European General Practice Research Network Burnout Study Group. Burnout in European family doctors: the EGPRN study. *Fam Pract* 2008; 25: 245–65.
13. Baird B, Charles A, Honeyman M, *et al.* *Understanding Pressures in General Practice*. London: Kings Fund, 2016.
14. Suñer-Soler R, Grau-Martín A, Font-Mayolas S, *et al.* Burnout and quality of life among Spanish healthcare personnel. *J Psychiatr Ment Health Nurs* 2013; 20: 305–313.
15. Hall LH, Johnson J, Watt I, *et al.* Healthcare staff wellbeing, burnout, and patient safety: a systematic review. *PLoS One* 2016; 11: e0159015.
16. Salyers MP, Bonfils KA, Luther L, *et al.* The relationship between professional burnout and quality and safety in healthcare: a meta-analysis. *J Gen Intern Med* 2016; 32: 1–8.
17. Hall LH, Johnson J, Heyhoe J, *et al.* Exploring the impact of primary care physician burnout and wellbeing on patient care: a focus group study. *J Patient Saf* (in press).
18. Van Den Bos J, Rustagi K, Gray T, *et al.* The \$17.1 billion problem: the annual cost of measurable medical errors. *Health Aff (Millwood)* 2011; 30: 596–603.
19. Department of Health. *An Organisation With a Memory*. UK, London: The Stationary Office, 2000.
20. Calnan M, Wainwright D, Forsythe M, *et al.* Mental health and stress in the workplace: the case of general practice in the UK. *Soc Sci Med* 2001; 52: 499–507.
21. Fisher RF, Croxson CH, Ashdown HF, *et al.* GP views on strategies to cope with increasing workload: a qualitative interview study. *Br J Gen Pract* 2017; 67: e148–56.
22. Sinsky CA, Willard-Grace R, Schutzbank AM, *et al.* In search of joy in practice: a report of 23 high-functioning primary care practices. *Ann Fam Med* 2013; 11: 272–8.
23. Stevenson AD, Phillips CB, Anderson KJ. Resilience among doctors who work in challenging areas: a qualitative study. *Br J Gen Pract* 2011; 61: e404–10.
24. West CP, Dyrbye LN, Erwin PJ, *et al.* Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis. *Lancet* 2016; 388: 2272–81.
25. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006; 3: 77–101.
26. Linzer M, Manwell LB, Williams ES *et al.*; MEMO (Minimizing Error, Maximizing Outcome) Investigators. Working conditions in primary care: physician reactions and care quality. *Ann Intern Med* 2009; 151: 28–36, W6–9.
27. Cheshire A, Ridge D, Hughes J, *et al.* Influences on GP coping and resilience: a qualitative study in primary care. *Br J Gen Pract* 2017;bjgp17X690893.
28. Doran N, Fox F, Taylor G, *et al.* *Early GP Leavers Interim Report: Report to HEE & NHS England*, University of Bath, 2015. opus.bath.ac.uk/47271/1/Early_GP_Leavers_Interim_Report_4jun15_update_FINAL.pdf (accessed on 8 December 2017).
29. Goodman MJ, Schorling JB. A mindfulness course decreases burnout and improves well-being among healthcare providers. *Int J Psychiatry Med* 2012; 43: 119–28.
30. Krasner MS, Epstein RM, Beckman H *et al.* Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians. *JAMA* 2009; 302: 1284–93.
31. Kjeldmand D, Holmström I. Balint groups as a means to increase job satisfaction and prevent burnout among general practitioners. *Ann Fam Med* 2008; 6: 138–45.