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Exploring the impact of primary care physician burnout and wellbeing on patient care: A focus group study.

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Abstract

Objectives

To explore i) whether primary care physicians (General Practitioners (GPs)) perceive burnout and wellbeing to impact on the quality and safety of patient care, and ii) potential mechanisms behind these associations.

Method

Five focus groups with 25 practicing General Practitioners were conducted in England, in either in the participants' practice, or in a private meeting room outside of their workplace. An interview schedule with prompts was followed with questions asking how participants perceive GP burnout and poor wellbeing could impact on patient care delivery. Audio recordings were transcribed verbatim and analyzed using Thematic Analysis.

Results

GPs believed that poor wellbeing and burnout affects the quality of care patients receive through reducing doctors' abilities to empathize, to display positive attitudes and listening skills, and by increasing the number of inappropriate referrals made. Participants also voiced that burnout and poor wellbeing can have negative consequences for patient safety, through a variety of mechanisms including reduced cognitive functioning and decision making abilities, a lack of headspace, and fatigue. Furthermore, it was suggested that the relationship between wellbeing/burnout and mistakes is likely to be circular.

Conclusion

Further research is needed to ascertain the validity of these perceptions. If found, physicians, healthcare organizations, and policy makers should examine how they can improve physician wellbeing and prevent burnout, as this may be a route to ensure high quality and safe patient care.

Keywords

Wellbeing; Burnout; Primary Health Care; Qualitative; Patient Safety; General Practice

Introduction

It is well documented that healthcare staff suffer from high levels of burnout and poor wellbeing¹⁻³. Burnout is an affective response to chronic work-related stress, resulting in feelings of exhaustion, depersonalization, and low personal accomplishment⁴. Wellbeing is a broader concept, best described as on a continua ranging from poor wellbeing (feelings of depression, anxiety, sadness) to good or high wellbeing (happiness, flourishing)⁵. Burnout, depression, and anxiety have been linked to negative outcomes in healthcare staff's personal lives, such as increases in substance misuse and suicidality^{6, 7}. Professionally, these syndromes and disorders have also been linked to a variety of negative organizational outcomes, including turnover intention and absenteeism^{8, 9}, poorer quality of patient care delivery, and reduced patient safety¹⁰⁻¹².

Primary care physicians (referred to as General Practitioners (GPs) in the UK) are a subset of healthcare professionals who are particularly at risk of burnout and poor mental health¹³⁻¹⁵. Studies from around the world have reported that Primary Care Physicians have a 2-43% higher rate of burnout, and 7-22% higher rate of psychiatric illness, compared to the other healthcare professionals, with these rates rising over the years^{1, 6, 13-21}. A longitudinal survey of GPs in the UK showed that they are reporting the highest levels of stress since 1998, the lowest levels of job satisfaction since 2001, and an increase since 2012 in those expecting to quit patient care in the next five years²². Despite this, studies investigating the impact of GP wellbeing and burnout on patient care have been scarce. Previous research has either grouped General Practitioners in with secondary care specialists in the analysis, or has taken a primarily quantitative approach^{23, 24}. These studies have shown contradicting findings regarding the association between wellbeing/burnout and patient care outcomes, which may be due to the specific measures chosen. Additionally, the lack of qualitative studies limits the ability to explore GPs' perceptions and beliefs on the effect burnout may have on patient

outcomes, along with the potential to identify underlying mechanisms for these associations. As such, we undertook the first study to specifically address this gap of knowledge through focus group discussions with General Practitioners in the UK. The specific aims were:

1. To provide an in depth investigation of whether GPs perceive burnout and their own wellbeing to impact on the quality of care they deliver.
2. To provide an in depth investigation of whether GPs perceive burnout and their own wellbeing to impact on patient safety.
3. To explore the nature of the relationships between wellbeing/burnout and patient care delivery, including potential explanatory mechanisms.

Methods

Five focus groups were conducted with currently practicing General Practitioners working in the UK, between September 2015 and February 2016.

Procedure

GPs were recruited via email using a snowballing recruitment method. LH conducted the semi-structured interviews at either the GPs' practice, or in a private meeting room elsewhere. Questions were asked on whether they perceive their own wellbeing and/or burnout to impact on the quality and safety of patient care they deliver, both generally, and on a day-to-day basis. Additional questions on factors influencing their wellbeing, and potential coping strategies were also asked, but will be described elsewhere. The topic guide can be found in figure 1. The transcripts were audio-recorded and then transcribed verbatim. Discussions lasted 45 to 90 minutes.

Participants

Focus groups consisted of three to six participants each. Participant and focus group characteristics can be found in table 1. Three focus groups consisted of GPs working within a

practice, or group of practices within the same area. The two additional focus groups consisted of locum GPs who worked across a variety of practices.

Analysis

The transcripts underwent thematic analysis in line with Braun and Clarke's (2006) six phase guidelines²⁵. All transcripts were coded by LH, based on a realist epistemological approach using inductive, semantic principles. 20% were double coded by JH to reduce bias. The authors revisited the transcripts after drawing a thematic map to ensure the themes accurately represented the majority of the data.

Figure 1. Discussion topic guide.

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| <p>Questions (prompts)</p> <ul style="list-style-type: none">• How would you define wellbeing?• How would you define burnout?• What would you consider to be the main contributors to wellbeing at work? (Positive and negative contributors)• Do you have a way to try and minimize the impact these issues have on your wellbeing? (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 wellbeing is increasing amongst doctors? (Why? What's changed?) <p>(Questions on links between wellbeing/burnout and patient care)</p> <ul style="list-style-type: none">• Are you encouraged to talk about your own wellbeing? (To your colleagues, professionals, family. Is it a taboo?)• What, in your opinion, would be the best way to improve the wellbeing of GPs, and prevent burnout? (Feasible ideas, if the sky was the limit) |
|--|

Results

The participants, despite their heterogeneity with regards to job position (locum/partner etc.), age, and experience, all discussed similar themes across their respective focus groups. The general consensus was that burnout and/or poor wellbeing was indeed perceived to negatively impact on both the quality of patient care and patient safety. The impact of burnout and poor wellbeing on i) quality of patient care and ii) patient safety, form two of the main themes, along with one additional theme surrounding the temporal relationship of burnout and wellbeing with patient care. For additional quotes for each theme, please see supplementary tables 1-3.

1. Burnout and poor wellbeing impacts on the quality of patient care

All participants were in agreement that General Practitioners, including themselves, would not be able to deliver patient care of as high a quality as usual if they were suffering from burnout, depression, anxiety, or stress. Both daily fluctuations in wellbeing as well as poor wellbeing over a longer period of time were voiced as impacting quality of care. The specific ways that quality of care was perceived to be affected were through: 1) Decreased empathy and listening skills, 2) Negative attitudes towards patients, and 3) Increased inappropriate referrals and over investigation.

1.1. Decreased empathy & listening skills

Participants identified that burnt-out or stressed doctors are more likely to struggle to empathize and display good listening skills.

“M1: If you are burnt-out and depersonalized and no longer empathizing with your patient, you might still do an adequate job of diagnosing their muscular skeletal pain but they won't feel listened to so they are more likely to complain about you.” [FG2]

They additionally commented that this behavior could also emerge in as short a time as a day; if they had had a stressful morning, the patients at the end of the day may not receive as high a quality of care as the patients in the morning, particularly by doctors suffering from burnout, as their ability to deal with daily fluctuations in stress is reduced.

1.2 Negative attitudes towards patients

The attitude that doctors display towards their patients can impact on how the patient feels both during the consultation, and upon leaving it. If a physician has poor wellbeing or is

burnt-out, they are less likely to have good quality interactions with their patients, which may leave the patient feeling unnerved and without the reassurance that is often sought.

“M2: I think a big part of our job is to try and educate and reassure people. It’s very very easy when you get someone come in with a cough (...) to say ‘it’s a virus, off you go’. If you’re burnt-out you’re more likely to do that, if you’re feeling a bit more kind of enthusiastic, you’re more likely to sit down and say, ‘well look this is a virus, this is how this presents, this is the things to look out for, this is why there’s no point in giving antibiotics now’ and turn it into a discussion with the patient.” [FG1]

1.3 Increased inappropriate referrals & over investigation

Participants discussed that poor wellbeing and/or burnout is likely to cause physicians to refer patients more than usual. In some cases this would result in unnecessary investigation, potentially causing patients undue distress. Referring seemed to be a way that physicians could remove themselves from a position of responsibility over the patient’s outcome. Referring also offers a more straightforward decision than considering how to manage an individual in the practice. As such, referring may act as a potential safety mechanism used by physicians who realize that they are not functioning as well as usual and want to ensure that they are not missing any symptoms as a consequence of their reduced ability to make decisions.

“F3: I certainly noticed, burnt out, depressed, whatever, referral rates, passing the buck goes up, and not taking responsibility, not being aware of the overall picture, which may not be unsafe, but it may be inefficient in terms of NHS resources.” [FG3]

2. Burnout and poor wellbeing impacts on patient safety

Participants generally concurred that both burnout and poor wellbeing have the potential to negatively impact on patient safety in various ways. However, it was voiced that patient safety is likely to be impacted only once the physician is ‘at the end’ of burnout (i.e., struggling with day to day work). Participants explored how burnout and poor wellbeing could impact patient safety both indirectly and directly, as discussed in the sub-themes below.

2.1 Indirectly

It was voiced that the ways in which burnout and poor wellbeing impacted on the quality of care could then subsequently indirectly lead to patient safety incidents. Expressions such as ‘lack of headspace’ and ‘not taking a holistic approach’ were often used to describe the indirect effects on safety. For example, not taking a step back to view a patient’s multiple concerns as groups of symptoms for the same illness and instead fixing each symptom individually, could lead to a missed diagnosis.

“F1: Yeah, you're not getting the whole picture are you?”

(...)

F2: And you don't have the time to connect dots, dots that might be from a while ago, might be they've been, in the last three months they've been here about this this and this, actually if you put those three things together that makes something that we really need to worry about and if you don't have the time and you don't have the brain space.

(...)

F1: Yeah, things get missed don't they?” [FG3]

Additionally, through poorer listening skills, physicians may not pick up on patient cues or hints towards what is really bothering them, which is both a quality of care issue and also a patient safety issue if it results in missed diagnoses.

“F2: If you can't pick up on their cues for, you know, because if you're on the ball and you're in the game you can tell, there's something else bothering them (...) if you're shutting them down because you have no resource to cope with it then you're not picking those things up.

M2: And on a busy stressed day (...) you're almost trying not to hear those cues.”

[FG3]

2.2 Directly

Burnout and poor wellbeing were almost unanimously voiced as having the potential to lead to increases in mistakes and errors, due to reduced cognitive functioning.

“F: Yeah I think very much if you're significantly stressed or approaching that burnout then I'm sure that the welfare of your patients would be quite significantly affected.

(...)

M1: (...) if your cognitive functioning is not as good as it should be then your decision making won't be as good as it should be and therefore at some point some harm will be fallen on somebody.

M2: I couldn't agree with what's been said more.” [FG4]

Additional mechanisms suggested as responsible for the link between burnout/wellbeing and patient safety were reduced concentration and tiredness, which could lead to poorer decision making, potentially resulting in patient safety incidents.

“F1: So, even if you were thinking about tiredness as part of poor wellbeing, it’s just harder to think clearly, to actually be able to have the space to listen to people’s concerns and make an accurate diagnosis, so wellbeing I would say definitely has an impact on patient care and I’ve seen that with a dozen doctors in difficulties (...) often wellbeing is low and you can see perhaps the mistakes that have been made.” [FG2]

Examples of patient safety incidents and their causes included missing abnormalities on blood test results due to task fatigue, and prescribing the wrong dose of painkillers due to stress, a lack of time, and a lack of concentration.

2. Temporal relationship

Participants discussed which comes first – complaints and mistakes, or poor wellbeing and burnout. It was agreed that it seemed to be a negative downward spiral whereby the more burnt-out you are, the more likely to make a mistake or receive a complaint, but also that if you receive a complaint or make a mistake, this is likely to have a subsequent negative effect on your wellbeing.

“F2: And then it’s a downward spiral from there isn’t it, cos the more you make mistakes, the more stressed you’ll get.

F1: If you get a complaint that makes you more stressed and then you don’t sleep.”
[FG5]

Discussion

Summary

This is the first, in depth qualitative study to investigate General Practitioners' beliefs about wellbeing and burnout and their relationship to the quality and safety of patient care. Five focus groups, despite heterogeneity in participants, were in agreement that poor wellbeing and/or burnout has the potential to negatively impact on both the quality of care that patients receive, and on patient safety. 'Wellbeing' and 'burnout' were often used interchangeably. The only time a clear distinction was made was during discussions around whether there would be patient safety implications. One participant voiced that they believed that only severe burnout would result in negative patient safety outcomes.

When discussing the underlying mechanisms of the relationships between burnout/wellbeing and quality of care, participants often drew on their own experiences and cited examples that included; poorer listening skills, negative attitudes towards patients, lack of empathy, and increased inappropriate referrals. When discussing how burnout and poor wellbeing could impact on patient safety, participants were less likely to offer their own personal examples. Instead, they either gave examples from people they knew who had suffered from burnout or depression, or offered explanations of why and how suffering from these symptoms could manifest in patient safety incidents. In terms of the potential consequences for burnout and/or poor wellbeing, these were discussed as having both indirect effects on patient safety (e.g. not having the cognitive reserves to make connections between symptoms, making a missed diagnosis more likely), and direct effects such as making prescription errors. Additionally, GPs commented that burnout/poor wellbeing and patient safety are linked in a downward spiral whereby increases in one are likely to result in increases in another.

Strengths and Limitations

This study has three main strengths. The first is the use of a qualitative approach, which is novel within this field of study. Through using qualitative methodology, this study has been able to provide first-hand, in-depth experiences and perceptions of the links between wellbeing/burnout and patient care by currently practicing GPs. Secondly, this approach has allowed GPs to discuss and thus propose mechanisms that could be responsible for the links previously mentioned. Until now, potential mechanisms behind these associations have not been explored. The third main strength is the heterogeneity of the participants. Despite the mix of locum workers, full and part-time GPs, those in training, and partners, participants discussed the same themes within and between focus groups and were in agreement regarding the effects of burnout and wellbeing on patient care delivery. An additional strength is that this study gave GPs a platform to discuss and explore these topics, giving them time and space to reflect on their own wellbeing and consider how important it is to themselves and their patients.

Due to the sensitive nature of this topic, the results may be prone to social-desirability biases. Additionally, the participants were all working within the NHS in the UK. As such the generalizability to other healthcare systems and countries may be limited. However, burnout levels are elevated in primary care physicians in a large number of countries, therefore the implications of these results are of importance universally.

Comparison with Existing Literature

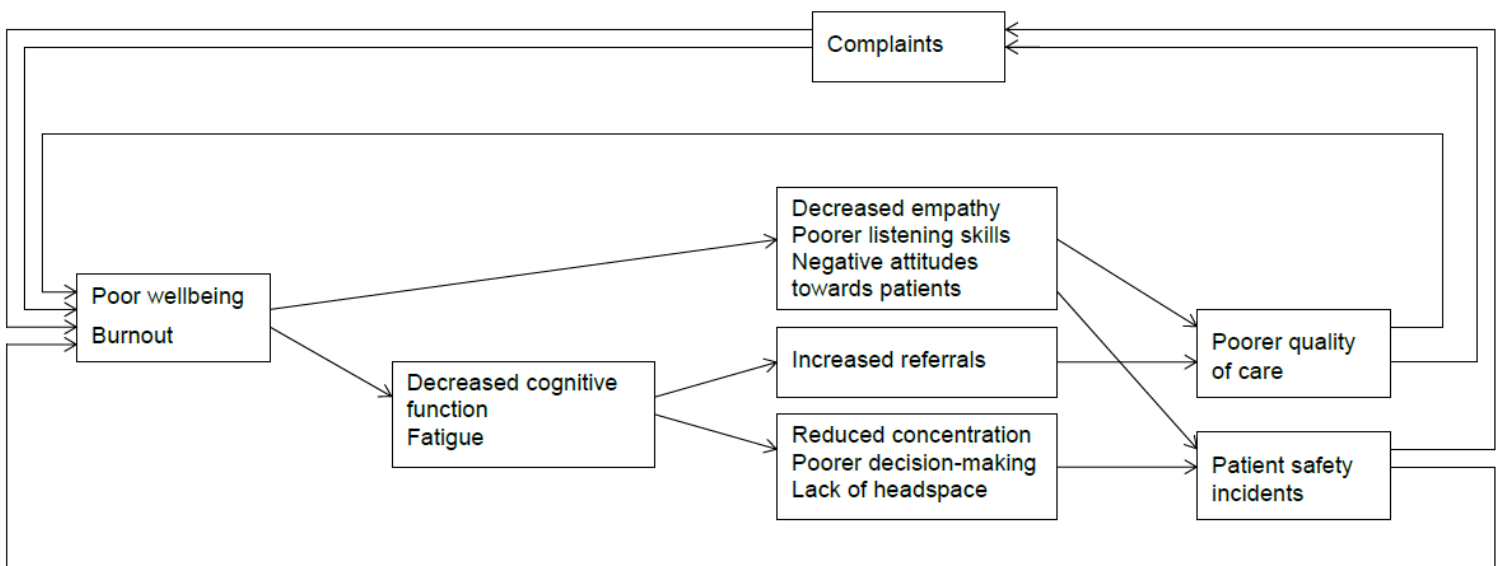
Our findings are in accord with previous studies on the links between burnout, wellbeing, and patient care within a variety of healthcare settings¹⁰⁻¹². As such, our results lend towards the conclusion that there is as much a relationship between GP wellbeing and burnout with the quality and safety of patient care, as there is within secondary care. Due to the higher rates of burnout and psychiatric disorders among GPs than those working in secondary care,

combined with the fact that over 90% of all patient encounters are within primary care, this association is perhaps all the more alarming²⁶.

A limitation within the literature in this field in general is the uncertainty of whether burnout or depression is more strongly associated with patient safety. The answer to which has important implications for how to best improve safety. A recent review aimed to determine which is the more important factor, with the conclusion that both have important consequences for safety outcomes¹⁰. Furthermore, there is evidence that suffering from both depression and burnout can result in an increased risk of patient safety incidents compared to suffering from solely one or the other²⁷. Since the aforementioned review, a more recent study found that burnout fully mediates the association between depression and safety perceptions in nurses, suggesting that burnout is the more strongly associated construct²⁸. However, another current limitation in the literature is the lack of studies using objective measures of safety and the difference in findings when objective and subjective measures are used. Only one study thus far has utilised both measures, with the finding that depression is associated with objectively (but not subjectively) measured medical errors, whereas burnout was only associated with subjectively and not objectively measured errors²⁹. Whilst objective measures are generally thought to be more reliable, due to the difficulty of objectively capturing patient safety outcomes within complex healthcare settings it would be misguided to dismiss the many studies providing evidence from subjective outcomes, as they may provide more sensitive measures. In the context of our study, the majority of participants perceived both wellbeing and burnout to impact on the quality of patient care and patient safety. However, one participant voiced that they believed patient safety to only be affected once a GP is 'at the end of burnout'. Evidently, more research is needed whereby both subjective and objective measures of safety are used in combination, to fully understand the relationships between all three (wellbeing, burnout, safety) variables.

Discussion over the direction of the relationship is not new, with research within secondary care in the US finding that the relationship between burnout and errors is reciprocal, which the participants of this study also suggested³⁰. There is, however, limited literature investigating the mechanisms behind the links between burnout, wellbeing, and patient care. Whilst there has been some theorizing around why burnout or job stress leads to poorer patient care i.e. in terms of the Conservation of Resources Model³¹ and the Job-Demands-Resources Model³², these models are unable to explain the precise biological, cognitive, or behavioral processes that are responsible for burnt-out or depressed doctors delivering poorer quality and less safe care. Our results offer some suggestions of these mechanisms, such as reduced cognitive functioning leading to poorer decision making abilities. See figure 2 for proposed pathways between burnout, wellbeing, patient safety, and quality of care.

Fig 2. Diagram demonstrating the mechanisms behind the links between wellbeing/burnout and the quality and safety of patient care.



Implications for Research and Practice

This study shows General Practitioners believe their wellbeing and burnout levels are just as likely to be associated with both the quality of patient care, and patient safety, as it is known

to be within secondary care physicians. Research is now needed to ascertain the validity of these perceptions, through quantitative, longitudinal studies within this setting. Furthermore, these findings have implications for healthcare organizations, practices, and policy makers: if further research using quantitative methods confirms the current findings, they should consider investing in ways to improve physician's wellbeing and prevent burnout. This will promote a healthier workforce and it may also have the potential to improve both the quality of care patients receive and patient safety outcomes. Additionally, more research is required to identify reliable and acceptable methods that can identify physicians who either have or are at risk of burnout or depression. This will increase the likelihood that these physicians will have access to appropriate support and should subsequently ensure better and safer care for patients. Organizational interventions such as leadership training, and physician directed interventions such as mindfulness training, have been shown to be effective at reducing physician burnout in secondary care, with mindfulness-based-therapies also being strongly effective at reducing depression and anxiety^{33, 34} Both types of interventions therefore warrant consideration within primary care for the benefit of staff, patients, and the wider healthcare system.

Conclusion

GPs in the UK perceive their wellbeing to have important implications for their patient care delivery. Poor wellbeing and burnout are perceived to negatively impact on both the quality of patient care, and patient safety. Potential mechanisms for this relationship include reduced cognitive functioning, fatigue, a lack of headspace, and increased referrals. As such, one route to ensure high quality and safe patient care within primary care could be to work on improving GP wellbeing and preventing burnout.

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Ethical Approval

This research received ethical approval from the University of Leeds School of Psychology Ethics Committee (ref #15-0075 accepted on 06/03/15), and Health Research Authority R&D approval (IRAS ref #178501).

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1 **Figure Legends**

2

3 *Figure 1.* Discussion topic guide.

4 *Figure 2.* Diagram demonstrating the mechanisms behind the links between

5 wellbeing/burnout and the quality and safety of patient care.

6

7