

# Burnout in undergraduate medical students

C4ME SUPPLEMENT

## AUTHOR INFORMATION

---

### **Bethany Bowyer**

Cardiff University School of Medicine

### **Dr Katie Webb**

Cardiff University School of Medicine

### **Dr Ian Collings**

Health Education and Improvement Wales

### *Address for Correspondence:*

Bethany Bowyer  
Cardiff University School of Medicine  
The Cochrane Building  
Heath Park, Cardiff  
CF14 4YU  
United Kingdom

Email: bowyerb@cardiff.ac.uk

*No conflicts of interest to declare*

Accepted for publication: 17.10.19

### **Background**

The increasing prevalence of burnout within the medical profession has been recognised over recent years. However, there is confusion surrounding the definition of burnout defined by Maslach as involving emotional exhaustion, depersonalization or cynicism and weakened sense of personal accomplishment, resulting in its sufferers struggling to identify and accept their feelings delaying necessary support and management. (1, 2) Forty-five percent of medical students' state having suffered with burnout; (3) adverse events may result in later training due to reduced professionalism and engagement. (4, 5) The GMC National Training Survey 2018 revealed the impact of burnout in postgraduates with nearly a quarter of trainees stating that they felt burnt out because of their work. (6) Efforts need to be directed to improving undergraduate burnout prevention allowing medical students to enter a career where they feel comfortable and supported.

### **Methods**

A mixed-methods approach was adopted using an online survey containing open and closed questions and qualitative semi-structured interviews. Four research questions were developed to explore students' perceptions, reasons, prevalence and management strategies surrounding burnout.

All fifth-year medical students studying at Cardiff University were eligible to enrol. An online survey was distributed through medical school administrators, social media pages, emails and snowballing.

Students were given the option to leave their email for a further interview. Fourteen medical students expressed interest in interviews and they all provided written consent. Due to the sensitive nature surrounding burnout, interviewees were provided with contact information for Medic Support.

A semi-structured interview schedule was developed surrounding the research aims. Just under 4-hours of recorded, anonymised data was collected and externally transcribed. Interviewees were asked to share any stories they had witnessed/experienced in relation to the question. These quotes were then narratively analysed to help strengthen the depth of the findings through exploring students' narratives and identity in relation burnout. Thematic analysis was also used; to increase rigour an initial coding framework was developed inductively with supervisors, and 20% of the transcripts were double-coded to check for consensus. Nine major themes and 123 sub-themes were identified including the GIN (general incident narrative) and PIN (personal incident narrative) codes used in the narrative analysis.

Ethical Approval given by Cardiff Medical School Research Ethics Committee prior to commencing the research.

## Results

All interviewees mentioned stress when describing their understanding of burnout, 12 mentioned the idea of reaching a limit as burnout causes its sufferers to feel unable to go on. Eleven spoke of tiredness/exhaustion because of burnout, which negatively impacts on their concentration, decreasing students' motivation.

Thirteen students mentioned assessments as a potential source of burnout. Interviewees explained the difficulty in making time for placement and revision, alongside a balanced lifestyle. The pressure medical students place on themselves to succeed was mentioned by 12, some suggested that medical students could be pre-disposed to burnout due to the constant comparisons with others and outside pressure from family and friends.

Nine students expressed that burnout was very prevalent. All interviewees outlined the physical effects of suffering with burnout such as reduced sleep, altered eating habits, sickness and absence. Students emphasised the predominant emotional effects as students become reclusive and isolate themselves from social events and activities they used to enjoy. Some students mentioned that burnout can be misdiagnosed as depression resulting in sufferers taking unnecessary medications.

Both social and academic support was recognised by all as a vital management strategy. However, students mentioned a lack of trust for the Medic Support service, fearing that conversations may appear on their academic record. Hobbies including exercise and university societies allow sufferers the opportunity to take time away from their studies and meet other students.

## Discussion

This research is the first of its kind to explore medical student's understanding of burnout and unveil reasons and possible management strategies employed by those suffering. The research identified that medical students have similar perceptions of burnout, with all mentioning stress and the majority providing ideas of 'boundaries being pushed' resulting in exhaustion.

Students described struggling to balance placement and work alongside their social activities and hobbies which mirrors the transition into postgraduate training as junior doctors are expected to work long hours finding little time to socialise and rest. (7) Interviewees discussed the effects of burnout on student's future career, opting to maintain a work-life balance. A recent BMA report found similar problems in junior doctors, with many taking breaks from training due to fear surrounding their mental health and workloads experienced by those working for the NHS. (8)

Three areas for prevention were identified; improved support through promoting Medic Support ensuring it is accessible and educate students of its services. Raising burnout awareness amongst students enabling them to recognise its signs and access necessary support, through the delivery of stress management and the importance of self-care lectures. Reduce stigma surrounding burnout by informing students of its prevalence, granting them confidence to converse freely and access support.

## Lessons Learnt

Recruitment of my interview sample proved a challenge during the project. I had limited time to conduct interviews to ensure I had data to code and analyse to write up my research.

The recruitment process was harder than expected and required perseverance and dedication. Despite my initial concern about the quality and quantity of data collected, I was able to deduce strong conclusions from my findings and address my projects aims.

The use of convenience sampling increased my sample through recruiting easily accessible students. (9) However, some students may find burnout uncomfortable to discuss therefore snowball sampling helped to access harder to reach students. (10)

In conclusion, the difficulties faced during this research deepened my understanding of different sampling methods. In future projects, I will adapt my recruitment process to best suit my eligible candidates to ensure I gain an adequate sample size.

## References

- Maslach C, Jackson S. The measurement of experienced burnout. *Journal of Organizational Behaviour*. 1981;2(2):99-113.  
<https://doi.org/10.1002/job.4030020205>
- Institute for Quality and Efficiency in Health Care. Depression: What is burnout? *Informed Health*; 2012 [accessed 27 Jul 2019]. Available from: <https://www.informedhealth.org/what-is-burnout.2125.en.html?part=symptome-5i>.
- Dyrbye L, Thomas M, Huntington J, Lawson K, Novotny P, Sloan J et al. Personal Life Events and Medical Student Burnout: A Multicenter Study. *Academic Medicine*. 2006;81(4):374-384.  
<https://doi.org/10.1097/00001888-200604000-00010>  
PMid:16565189
- Prakash J, Singh S, Das R, Srivastava K. A cross-sectional assessment of stress, coping, and burnout in the final-year medical undergraduate students. *Industrial Psychiatry Journal*. 2016;25(2):179.  
[https://doi.org/10.4103/ipj.ipj\\_68\\_16](https://doi.org/10.4103/ipj.ipj_68_16)  
PMid:28659697 PMCID:PMC5479091
- Sobowale K, Ham S, Curlin F, Yoon J. Personality Traits Are Associated with Academic Achievement in Medical School: A Nationally Representative Study. *Academic Psychiatry*. 2017;42(3):338-345.  
<https://doi.org/10.1007/s40596-017-0766-5>  
PMid:28779471
- National training surveys: Initial findings report. GMC. 2018 [accessed 24 July 2019]. Available from: [https://www.gmc-uk.org/-/media/documents/dc11391-nts-2018-initial-findings-report\\_pdf-75268532.pdf](https://www.gmc-uk.org/-/media/documents/dc11391-nts-2018-initial-findings-report_pdf-75268532.pdf).
- Lemaire J, Wallace J. Burnout among doctors. *BMJ*. 2017;j3360 [accessed 20 Oct 2019]. Available from: <https://www.bmj.com/content/358/bmj.j3360>.  
<https://doi.org/10.1136/bmj.j3360>  
PMid:28710272
- Junior doctors career trends survey. BMA. 2018 [accessed 27 July 2019]. Available from: <https://www.bma.org.uk/collective-voice/policy-and-research/education-training-and-workforce/juniors-career-survey>.
- Saumure K, Given L. Convenience Sample. In: Given L, editors. *The SAGE Encyclopaedia of Qualitative Research Methods*. Thousand Oaks, California: Sage; 2008. p. 124-125.
- Atkinson R, Flint J. Accessing Hidden and Hard-to-Reach Populations: Snowball Research Strategies. *Social Research Update*. Department of Sociology, University of Surrey; 2001 [accessed 20 Oct 2019]. Available from: <http://sru.soc.surrey.ac.uk/SRU33.html>.



The **British Student Doctor** is an open access journal, which means that all content is available without charge to the user or his/her institution. You are allowed to read, download, copy, distribute, print, search, or link to the full texts of the articles in this journal without asking prior permission from either the publisher or the author.

---

[bsdj.org.uk](http://bsdj.org.uk)



[/thebsdj](https://www.facebook.com/thebsdj)



[@thebsdj](https://twitter.com/thebsdj)



[@thebsdj](https://www.instagram.com/thebsdj)

[Journal DOI](#)

10.18573/issn.2514-3174

[Issue DOI](#)

10.18573/bsdj.v3i3

This journal is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. The copyright of all articles belongs to **The British Student Doctor**, and a citation should be made when any article is quoted, used or referred to in another work.



[Cardiff University Press](#)

Gwasg Prifysgol Caerdydd

The **British Student Doctor** is an imprint of Cardiff University Press, an innovative open-access publisher of academic research, where 'open-access' means free for both readers and writers.

[cardiffuniversitypress.org](http://cardiffuniversitypress.org)