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A qualitative study exploring the wellbeing experiences of Paediatric Critical Care consultants working in the UK

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RUNNING HEADER: WELLBEING EXPERIENCES OF PCC CONSULTANTS

A qualitative study exploring the wellbeing experiences of Paediatric Critical Care consultants working in the UK

Isabelle Butcher^a, Sumayyah Saeed^b, Rachael Morrison^c, Peter Donnelly^d and Rachel Shaw^{b*}

Affiliations

^a Department of Psychiatry, University of Oxford, Oxford, UK.

^b Institute of Health & Neurodevelopment, College of Health and Life Sciences, Aston University, Birmingham, B4 7ET, UK.

^c Paediatric Intensive Care Unit, Birmingham Women's and Children's NHS Foundation Trust, Steelhouse Lane Birmingham B4 6NH, UK.

^d Paediatric Intensive Care Unit, The Royal Hospital for Children, Glasgow, G51 4TF, UK.

*Corresponding author r.l.shaw@aston.ac.uk

Abstract

Objectives: The aim of this study was to examine the wellbeing experiences of consultants working in Paediatric Critical Care (PCC) settings within the United Kingdom (UK).

Design: Qualitative design

Setting: Paediatric critical care

Participants: 11 medical consultants working in PCC in a range of PCC settings/transport teams in the UK from nine units participated. Participants ranged in years of experience as a consultant from four to 23 years.

Interventions: A set of open semi-structured questions were used to elicit information about participants' experiences of compassion fatigue and burnout, and their wellbeing more broadly. Interviews were audio recorded and transcribed. Data were analysed thematically.

Results: Thematic analysis identified eight themes. These were; i) *positive and negative impact of working during COVID19*, ii) *job satisfaction and scrutiny in the unique environment of PCC*, iii) *the value of supporting an ageing workforce through modified shift work*, iv) *support and recognition from the Trust/Board*, v) *the use of personal and adaptive coping strategies*, vi) *importance of civility and good team work*, vii) *recognition of the effect of stressors in and out of work* and viii) *recommendations for future solutions to enhance optimal wellbeing for PCC consultants*.

Conclusion: We have provided insight into PCC consultants' burnout and wellbeing experiences. Increasing difficulties with on-call and night shifts as one ages were reported. Action on shift patterns is needed to protect and retain this expert workforce. Consultants felt Trusts/Boards could do more to provide accessible wellbeing interventions, tailored to their needs. Where funded PCC psychology posts existed, they were greatly appreciated. Our work corroborates the recent General Medical Council report highlighting doctors' core needs for wellbeing: autonomy, belonging, competence. Burnout is a long-term problem, requiring sustainable solutions. Evidence-based interventions to improve consultants' wellbeing need to be evaluated to determine how we can best support this PCC workforce.

Key words: *intensive care units, pediatric; consultants; burnout, professional; occupational stress; compassion fatigue; qualitative research*

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Strengths and Limitations

- A key strength to this research is its exploratory design. With very little previous research describing the quality of consultants' experiences of burnout and compassion fatigue, this study offers unique insight.
- Individual interviews were conducted with consultants, which were led by their own experiences and what mattered to them, rather than being led by predetermined theory.
- We applied Yardley's quality criteria to ensure the research was undertaken to the highest possible standards.
- Although we have representation from nine paediatric intensive care units across the UK, we acknowledge this may be perceived as a small sample by some. Further research in other units and across the international field of paediatric critical care would help strengthen the findings.

56 **Introduction**

57 Working in paediatric critical care¹ (PCC) is a stimulating and rewarding environment in
58 which to work however healthcare professionals working in PCC are exposed daily to
59 traumatic events and stressful situations. In addition, the workload within PCC is often both
60 consultant led and consultant delivered with a significant on call requirement. Working in
61 PCC can be stressful due to the intensity of the work, emotional and moral distress.^{1 2} It is
62 unsurprising therefore that research globally has shown that individuals working in PCC
63 experience high rates of burnout, compassion fatigue and symptoms associations with
64 posttraumatic stress disorder (PTSD)³⁻⁵. Continual exposure to patient and family distress can
65 be emotionally taxing for healthcare professionals working in PCC.

66
67 In recent years there has been a surge of evidence highlighting that poor wellbeing amongst
68 staff working in PCC is a persistent problem. The literature to date has largely focused on
69 nursing staff and trainee medical professionals.^{6 7} Furthermore within the current research
70 field there is a lack of research that is solution focused. This research is compelling and
71 highlights the issues that these healthcare professionals face working in PCC. There is a
72 paucity of evidence with consultants in PCC who face unique challenges; they are required to
73 manage staff and support a wider team, as well as having to make critical clinical decisions,
74 often as the most senior member of a team. To date, the research has predominantly focused
75 on measuring the pathologies of burnout, posttraumatic stress, compassion fatigue and moral
76 distress using standardised measures^{2 8}. Whilst this research is important^{3 9} it does not give a
77 'full' picture of healthcare professionals' experiences at work, e.g. how their burnout makes
78 them feel or how they perceive it impacts on their ability to perform. Furthermore, research to

¹ The authors note that PIC and PCC are used interchangeably, for this study PCC is used to encompass high dependency units (HDU), and transport teams.

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2
3 79 date has focused on measuring the size of the problem rather than looking toward finding
4
5 80 solutions with little research solution focused.¹⁰
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8 81

9
10 82 The paucity of research focusing on medical consultants working in PCC means we know
11
12 83 very little about this important group. This study aimed to explore UK PCC consultants'
13
14 84 experiences of burnout and compassion fatigue with a view to understanding how their
15
16 85 wellbeing may be improved.
17
18
19 86

22 87 **Method**

25 88 **Design**

27 89 This study adopted an exploratory, qualitative design to elicit responses to questions around
28
29 90 participants' experiences of burnout, compassion fatigue, and wellbeing. This design allows
30
31 91 individuals to freely articulate their thoughts, without the researcher being prescriptive. This
32
33 92 means data collection is more dynamic, with the participant leading on what matters to them,
34
35 93 rather than the researcher making assumptions.^{11 12} The consolidated criteria for reporting
36
37 94 qualitative research (COREQ¹³) guidance was followed in the reporting of the study.
38
39
40
41 95

44 96 **Sample**

46 97 This study was set within paediatric critical care units in the UK. Eligible participants were
47
48 98 consultants in PCC units and/or Transport teams in the UK.
49
50
51 99

53 100 Convenience and purposive sampling were adopted to ensure that all consultants at each UK
54
55 101 PCC unit had the opportunity to participate if they would like to as well as ensuring
56
57 102 representation in the sample from consultants with different years of experiences.
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59
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104 **Procedure**

105 The study received ethical approval from Aston University Research Ethics Committee and
106 permission was granted by the President of the Paediatric Critical Care Society to invite their
107 members to participate. The study was advertised through the PCC Society and on social
108 media during April to June 2021 and volunteers were invited to contact the research team.
109 This study formed part of one author's (SS) MSc award.

110
111 Once participants had contacted the researcher, they were sent a Participant Information
112 Sheet and consent form, which could be completed electronically via Qualtrics. Participants
113 were then invited to take part in an online semi-structured interview. All interviews were
114 conducted by an independent researcher (SS), who had no previous experience of PCC and
115 was not connected to any of the participating units, Trust or Health Boards. The interview
116 schedule was informed by existing literature as well as discussions with an advanced nurse
117 practitioner (RM), a medical consultant (PD), and a health psychologist (RS). SS was trained
118 in conducting qualitative interviews by IB and RS to ensure that appropriate questioning,
119 intonation, and prompts used were appropriate.

120
121 Following completion of the interview, participants were sent a debrief form which
122 signposted them to organisations that offer additional support to improve healthcare
123 professional wellbeing. Recruitment ceased once data saturation had been reached. All
124 interviews were audio-recorded, transcribed, and stored on a secure online drive. Identifiable
125 information was removed to protect participants' anonymity. Each participant was sent their
126 anonymized transcript within two weeks of taking part in the study to enable them to omit
127 and/or change information in the transcript to ensure they were happy for it to be used as part

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1
2
3 128 of the analysis of this study. Clinical colleagues in the research team did not have access to
4
5 129 the transcripts to further protect participants' anonymity.
6
7

8 130

9
10 131 A distress protocol was used throughout this study to ensure appropriate safeguarding was in
11
12 132 place should any issues of concern for participants or their colleagues be raised. No such
13
14 133 issues were raised during the study.
15
16

17 134

18
19 135 **Demographic data**

20
21 136 Self-report information on the following demographic variables were obtained: age, gender,
22
23 137 ethnicity, years of experience as a consultant in PCC.
24
25

26 138

27
28 139 **Thematic data analysis**

29
30 140 Data was analysed using inductive thematic analysis which offers a flexible process enabling
31
32 141 the exploration of rich data efficiently.¹⁴ An inductive approach was taken meaning theme
33
34 142 generation was led by the participants' accounts rather than any predetermined assumptions.
35
36

37 143 A six-step approach to analysing the data was used as outlined below using Braun and

38 144 Clarke's methodology¹⁴. SS and IB collected the data and led the analysis of the raw data;

39
40 145 both were independent of any PCC units. All the authors took part in steps 4 – 6.
41
42

43
44 146 1. Data were transcribed verbatim by the researcher (SS).
45
46

47 147 2. The transcripts were read and re read by members of the research (SS and IB) team to
48
49 148 enable familiarisation with the data. Interviews were electronically placed into NVivo
50
51 149 qualitative software to enable the data to be organised systematically.
52
53

54 150 3. Systematic line by line coding was conducted to identify common themes within the
55
56 151 data (SS and IB).
57
58
59
60

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- 1
2
3 152 4. The themes were discussed within the whole research team to identify key common
4
5 153 themes across the interviews enabling a thematic map to be constructed. Any
6
7 154 differences in themes were discussed by all authors.
8
9
10 155 5. The themes were finalised, defined, and names generated.
11
12 156 6. The final themes were checked with all members of the research team.
13
14
15 157

158 Quality and rigour

159 To ensure that rigour was maintained throughout the completion of this study, the research
160 team followed Yardley's¹⁵ quality criteria for qualitative research ensuring the study was
161 sensitive to the context being studied, the methods were rigorous, our reporting of the study
162 was transparent and coherent, and the impact of the work was conveyed. As above, we also
163 consulted COREQ¹³ to ensure the reporting of the study was appropriate.
164

165 It is acknowledged that each author's experiences inevitably shape data analysis.¹⁶ It is
166 important to note that the lead author (IB) is a female psychology postdoctoral researcher
167 with experience in conducting research with individuals with severe mental illness. SS is a
168 female MSc student with experience in conducting qualitative interviews. RM is a female
169 advanced nurse practitioner with over twenty-five years' experience of working in the
170 National Health Service (NHS). PD is a male medical consultant in PCC with over twenty
171 years of experience of working in the NHS. RM and PD currently work in (different) PCC
172 units and have published qualitative and quantitative research over the last ten years within
173 the critical care research field. RS is a female Health Psychologist with expertise in
174 qualitative methodology and healthcare intervention development and evaluation. She has
175 over twenty years' experience of conducting applied clinical research with a range of
176 populations in primary and secondary care and in the community.

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6 178 **Patient and Public Involvement**

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8 179 Key stakeholders were involved in the conceptualisation of the study. Through the PCC
9
10 180 Society, medical and nursing staff in UK PCC units were able to provide feedback on the
11
12 181 design of the study, research questions, and methods used. Findings were presented to PCC
13
14
15 182 Society and feedback gathered, which has informed the writing of this report.
16

17 183

18
19
20 184 **Results**

21
22 185 Eleven PCC consultants took part in this study from April to June 2021 All 11 consultants
23
24 186 who participated work in PCC units that are consultant led services with on call
25
26 187 commitments. Individuals ranged in age from 42 to 56. Of these 11 individuals, five were
27
28 188 male and six were female. The years of experience as a PCC consultant ranged from 4 to 23
29
30 189 years. Participants were recruited from 9 UK-based PCC units.
31

32
33
34 190

35
36 191 The nine PCC units that these participants were varied in terms of size and patient cohort.
37
38 192 They included both cardiac intensive care units, general intensive care units and mixed units.
39
40 193 specialities. Each interview lasted between thirty minutes and one hour and 30 minutes.
41

42
43 194

44
45 195 Thematic analysis generated eight themes representing consultants' experiences of burnout,
46
47 196 compassion fatigue, and wellbeing (see Table 1).
48
49

Themes
1. Positive & negative impact of working during COVID 19
2. Job satisfaction & scrutiny in the unique environment of PCC
3. The value of supporting an ageing workforce through modified shift

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197	work
198	4. What support and recognition are needed from the Trust/Board?
199	5. Successful coping strategies are personal & adaptive
200	6. Importance of civility & staff retention for good teamwork
201	7. Recognition of the cumulative effect of stressors in and out of work
202	8. Recommendations identified for future solutions to enhance wellbeing

Table 1: Themes identified***Theme 1: Positive and negative impact of working during COVID 19***

Within this theme participants were able to clearly identify unexpected positive consequences of the COVID-19 pandemic. Additionally, participants reflected on the negative repercussions of COVID-19. The positive reflections included the time that it gave them with their own immediate families, for example. The negative consequences of the pandemic included the added pressures of working in intensive care when wearing personal protective equipment (PPE) and the anxiety created through the uncertainty of the wider context of the pandemic.

“Yeah, it made me much happier.... because like you didn’t have to go to work anymore, all of a sudden, instead of like dragging yourself in for pointless rubbish, you know meetings or whatever, all of a sudden you’re like well why don’t we do this all online so you can now live your life, attend the meetings you need to attend without attending you know” [Participant

1005]

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2
3 220 *“There was a lot of uncertainty about how you would feel if your loved one was being cared*
4
5 221 *for by a PICU intensivist who didn’t know what they were doing versus an adult intensivist.*

6
7
8 222 *So, we might be you know overstepping our remit in terms of our training and such.”*

9
10 223 [Participant 1003]

11
12
13 224 *“We used to meet in person, and we used to have our consultant meetings at each other’s*

14
15 225 *houses and all meet up and have dinner and chat through things and again that not has*

16
17 226 *happened since March a year ago.”* [Participant 1009]

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23
24 228 ***Theme 2: Job satisfaction & scrutiny in the unique environment of PCC***

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26
27 229 Participants recognised that working in PCC is an environment that brings its own challenges.

28
29 230 Participants were also able to articulate what gives them satisfaction as a PCC consultant. For

30
31 231 some this was teaching other healthcare professionals, for others it was interacting with the

32
33 232 patients and their families.

34
35
36 233 *“Definitely spending time with families, you know supporting families through you know*

37
38 234 *the... the hardest times of their lives and making a difference to them. Erm... I think that’s*

39
40 235 *probably the most satisfying thing”* [Participant 1003]

41
42
43
44 236 *“Erm, when our patients get better is the truthful answer [gives me the most satisfaction].*

45
46 237 *When a patient is really sick, and you feel like you have made a difference.... The other thing*

47
48 238 *I get a lot of satisfaction from personally is teaching the junior doctors. You know they get a*

49
50 239 *real buzz of learning to do the practical things or learning how to deal with a new sick*

51
52 240 *patient, and I really enjoy that aspect of it.”* [Participant 1005]

53
54
55
56 241 Participants were able to share their own experiences of moral distress and how in recent

57
58 242 years their respective units have seen a shift in the population that they are treating.

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243 Individuals also reflected that working in PCC involves working under the scrutiny of the
244 public. Individuals noted that the expectations society has are so great that often the media do
245 not appreciate the good work that PCC units offer to their patients. Furthermore, participants
246 were able to clearly express that being a PCC consultant requires the scrutiny of one's actions
247 not only by society and the media but also in court.

248 *"60% of the children that come through the doors through PICU in the UK, are life limited.
249 And over the last year in our unit that has become 90-100%. Um and we have had fewer and
250 fewer of fit and well children. Um so that is challenging."* [Participant 1002]

251 *"As clinicians we are slightly hamstrung because we have patient confidentiality... We can't
252 discuss cases...but actually once the families start releasing that information then you can
253 because I say it's not us that's done that"* [Participant 1002]

254 *"Before I go to the court for any coroner's inquest I feel that oh my god I wish I didn't have
255 to do this...I go anyway regardless...That is the bit it's not dread I don't how to describe that
256 feeling but it's er not a nice feeling but I just tell myself I have to do this, finally I'm doing
257 this for the child....I also remind myself that it's my duty to do this and be present"*

258 [Participant 1010]

259 ***Theme 3: The value of supporting an ageing workforce through modified***
260 ***shift work***

261 Individuals recognised that working as a PCC consultant is harder as one ages and that
262 modifications are needed. Individuals furthermore explored that the environment and one's
263 own perception of PCC changes the older one gets; individuals were able to state that the
264 ability to experience compassion increases with age. Additionally, participants voiced a
265 concern that as one gets older it becomes harder to work at the pace that one was doing when

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266 they were a newly qualified consultant. Individuals reflected on their desire to work in a
267 different way to when they were younger.

268 *“I think that’s something that needs to be looked at, such as session planning and planning
269 for all the older and more experienced consultants and how you can use their skills within a
270 department and that maybe doing slightly less acute stuff and actually valuing that
271 contribution as much as valuing the person who is up all night”* [Participant 1007]

272 *“I think at 55 onwards there should be a deliberate process to tapering services, I think it’s a
273 combination of tapering on-call and then coming off it, maybe at 58.....I don’t think they
274 [the NHS Trust/Board] know how to manage the older senior colleagues [in PCC].”*
275 [Participant 1014]

276 ***Theme 4: What support and recognition are needed from the Trust/Board?***

277 The eleven participants highlighted that the support that their respective Health Trusts/Boards
278 provide is not adequate. Participants reflected on the creative wellbeing opportunities offered
279 to staff such as the provision of yoga sessions. Staff also reflected that these are not always
280 accessible to the PCC consultants due to the location and timing of the wellbeing sessions.

281 *“Of course, HR provide yoga on a [week day] or whatever they like it’s not practical for
282 most of us who have you know a clinician job, okay, so, I can’t just disappear from the ICU
283 to go and do downface dog for an hour. That’s not reasonable...”* [Participant 1003]

284 *“Putting on a yoga class is probably not what people need, what they need is people.... you
285 know we’ve just lost a lot of patients it’s been really sad and what should be done is
286 management to come in and say that must have been really tough what could we do to help?
287 What we get instead is oh well why have all these people died, haha you know, and you know
288 if you looked at this group of patients, they were going to die”* [Participant 1003]

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289 Participants felt that there was a lack of understanding between their Trust/Board and the
290 wellbeing of an individual working in PCC. Staff commented that what is offered by the
291 Trust/Board is often a quick solution that is not sustainable.

292 *“The organisation will signpost themselves to the eyeballs, signpost you to the eyeballs to*
293 *[laughs] you know, I don't know, occupational health, psychological blah, blah, blah, do-da-*
294 *loo-da-loo, and you know what I'm not interested”* [Participant 1014]

295 Some participants reflected that perhaps Trusts/Boards were not providing the appropriate
296 support and options with regard to staff wellbeing particularly to those staff working in PCC.

297 *“The [Trust/Board] look for all the kind of shiny gimmicky ways to just show that they care,*
298 *without actually addressing the problem and, so then you'll have [Trust/Board]-wide*
299 *initiatives being placed to, erm, for example, the latest one is all about access to psychology*
300 *and things, erm actually a lot of the problems people are facing, are related to workload and*
301 *are related to work pressure and system pressure and things like that... Erm, so but at least*
302 *then as an organisation, you can say that you care, and you try... so it does feel a little bit*
303 *like lip service sometimes, to be honest”* [Participant 1006]

304 **Theme 5: Successful coping strategies are personal & adaptive**

305 Despite the highly pressured environment in which they work, participants were able to voice
306 their own informal strategies to ensure that they maintain good wellbeing. These included the
307 use of humour, exercise, having an out of work routine and family to talk to you. Having a
308 personal faith was also valued by some participants.

309 *“I am a Christian, I have faith which helps me incredibly because I think there's a purpose er*
310 *so a child dying for me is not a failure...you know 2 children with the exact same condition*
311 *that I treated exactly the same and one recovers and the other one dies, it's not my success,*

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1
2
3 312 *it's not my failure. I've played my part to the best of my ability. Yeah, and it's not in my*

4
5 313 *hands so those things, bother me but don't burden me" [Participant 1013]*

6
7
8 314 *"I mean outside of the unit it is basically having a full set of things that make me happy...so*

9
10 315 *um spending time with my kids makes me happy.... I've started to learn the cello with my*

11
12 316 *daughter...I also have an allotment and I'll be honest I mainly kill things but it's still quite*

13
14
15 317 *fun and haha I have grown asparagus this year..." [Participant 1009]*

16
17
18 318 *I don't get angry at work, and I don't get depressed or cry at work...I tend to just cruise on*

19
20 319 *there and get the best done and um make some inappropriate jokes and comments...and*

21
22
23 320 *that's about it really" [Participant 1001]*

24
25
26 321 ***Theme 6: Importance of civility & staff retention for good teamwork***

27
28
29 322 Working on PCC, staff recognised the important and positive impact of good teamwork. This

30
31 323 teamwork enables staff to support one another through the covering of shifts. Staff also

32
33 324 reflected that working as a team can be hard when you are managing a team that includes a

34
35
36 325 range of healthcare professionals.

37
38
39 326 *"[We're a] big group of consultants and good group of nursing team and we are very honest*

40
41 327 *and open about that [burnout]...able to talk about it and hold up our hands and say we're*

42
43
44 328 *feeling a bit the same and trying to help each other" [Participant 1008]*

45
46
47 329 *"Also, the teamwork in the unit. ICU is not about individuals without the team and our*

48
49 330 *nursing team are phenomenal, erm, so we need them on the work we do." [Participant 1005]*

50
51
52 331 Staff also reflected that working as a team can be hard when you are managing a team that

53
54 332 includes a range of healthcare professionals. Individuals also articulated problems that can

55
56
57 333 arise from having a team that is short staffed.

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334 *“It’s not the patients it’s not particularly the nurses or even though they can be a little bit of*
335 *a pain in the neck sometimes, erm it’s your consultant colleagues trying to... trying to*
336 *manage them is usually the most, worst part of your life.” [Participant 1005]*

337 *“I have considered taking time out from work but felt that I couldn’t do that because of the*
338 *impact on my colleagues.... we’ve all been through the same experience. So er, so that’s*
339 *where we are.” [Participant 1003]*

340 *So, at the moment we are very short staffed. We have er... first on call that covers intensive*
341 *care erm, so it’s a 1 in 7 rota. But there is one gap in that rota, so we are already picking*
342 *that up as a locum for example, this month I would do 10 nights, and on calls, erm, and next*
343 *month I am doing 8. So, that’s on top of your already heavy working week. You’re already*
344 *existing on calls and you’re going to have to pick up, erm 3 or 4 on calls a month, over that*
345 *so it just grinds you down.” [Participant 1006]*

346 Participants reflected and explored the impact that nurse retention has on a PCC consultants’
347 own wellbeing. This indicates that nurse retention has an impact on other healthcare
348 professionals’ wellbeing.

349 *“We’ve got a huge sort of exodus of nursing staff at the moment...and that means that there’s*
350 *uncertainty in turnover in the nursing staff now, we have no control over that....suddenly*
351 *there’s more work for everybody else to do as we try and train somebody newer and we try*
352 *and to get to know somebody new, teams that worked well before don’t work as well for a*
353 *little while....and everything ‘s just like moving through treacle” [Participant 1003]*

354 ***Theme 7: Recognition of the cumulative effect of stressors in and out of work***

355 Individuals reflected on the difficulties that can emerge when an individual’s work life is hard
356 as well as their life outside of PCC. This combination of stressors compromises an

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2
3 357 individual's wellbeing. Individuals voiced that it is often difficult to know what is going on in
4
5 358 someone's life outside of work.

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7
8 359 *"It's like when you're a boxer and you're in the boxing ring and the guys punching your face*
9
10 360 *and that's work, and you get to the end of the round, and you go home. And when you get to*
11
12 361 *your corner, your trainer turns around and starts punching you in the face as well then it's*
13
14 362 *life isn't very fair at those points...And you can see it all starts to fall apart a little bit and*
15
16 363 *you know....know much pressure you are under at home at the moment it would add a huge*
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18 364 *amount to the overall picture"* [Participant 1001]

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23 365 ***Theme 8: Recommendations identified for future solutions to enhance***
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25 366 ***wellbeing***

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29 367 Participants were able to consider what solutions they perceived as needing to be
30
31 368 implemented when considering the wellbeing of consultants in PCC. Individuals reflected
32
33 369 that there needs to be a change in the rota, they need access to ad hoc psychological support
34
35 370 on the unit, as and when needs arise. Individuals reflected on the role that the wider
36
37 371 organisation should play in ensuring that they are kept well. Consultants expressed the need
38
39 372 for clear and accessible wellbeing interventions and support systems from the wider
40
41 373 Trust/Board to be available to them.

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44
45 374 *A rota that doesn't include a 24-hour shift where potentially I could be awake for the entire*
46
47 375 *time and you could kill someone at hour 23, and you'd feel bad about that..."* [Participant
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49 376 1005]

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53 377 *"Just ease, ease of access having them [the psychologists on the unit] and not having to*
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55 378 *phone somebody and taking that step of booking in to speak to somebody"* [Participant 1004]

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3 379 “The next project is to try and reach to the grumpy old sods like me and try and get them to
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5 380 participate personally rather than just being involved in processes to make sure that
6
7 381 everyone else is supported and happy but actually join in so that you can miss out the blind
8
9 382 spots” [Participants 1001]
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13 383 “Self-referral to occupational health without the referral of a manager that would be
14
15 384 important” [Participant 1003]
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18 385 Discussion

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21 386 The findings from this unique study provide a clear description of consultants’ experiences of
22
23 387 working in PCC, focusing especially on how their wellbeing can be challenged by their work.
24
25 388 The challenges identified are consistent with the existing literature, for example it is widely
26
27 389 documented that working shifts becomes increasingly harder the older one gets¹⁷⁻²¹. It is of
28
29 390 particular interest to note that participants were able to pinpoint how this could be improved,
30
31 391 with participants suggesting not having 24-hour shifts and better planning for consultants as
32
33 392 they age. Regardless of their age, consultants considered that they do not see themselves in
34
35 393 this role ‘forever’ with some participants considering alternative options such as more time
36
37 394 spent in education or research. This is not a surprise, and these findings support the
38
39 395 recommendations outlined by the British Medical Association²². These findings also support
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41 396 those from previous surveys conducted by Royal College of Physicians that illustrated that
42
43 397 shift patterns were a factor in consultants’ decisions to retire early^{23 24}. This finding suggests
44
45 398 that greater consideration should continue to be paid to the impact that shift work and taking
46
47 399 ‘on call’ shifts can have on a staff member’s wellbeing. Individual Trusts and Hospital
48
49 400 Boards should consider alternative options for consultants as they age, to ensure that their
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51 401 expertise is valued but that their wellbeing is not compromised because of their age. This data
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3 402 indicates that at the age of fifty-five, nights become more challenging with greater recovery
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5 403 time needed post nights.
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10 405 Working in COVID 19 has and continues to have a huge impact on healthcare professionals'
11
12 406 wellbeing²⁵⁻²⁹. For many healthcare professionals globally, COVID 19 brought uncertainty
13
14 407 and anxiety. Nevertheless, as well as the negative aspects of the pandemic, participants in this
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16 408 study articulated some positive factors that were a result of the COVID 19 pandemic, for
17
18 409 example being able to attend meetings from home and not travelling into work when not
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20 410 working clinically. Participants therefore were able to reflect on the pandemic to date in a
21
22 411 balanced manner, which is especially powerful because these interviews were conducted
23
24 412 during the pandemic.
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29 413

30 414 It is widely evident that working in PCC brings its own challenges that are perhaps not
31
32 415 evident in other areas of healthcare. Participants in this study were able to consider what
33
34 416 gives them satisfaction as a PCC consultant, for some that included teaching their peers and
35
36 417 for others that was supporting the patients and their families. It is pertinent to note that all
37
38 418 participants were able to answer this question without hesitation, suggesting that despite the
39
40 419 stressful environment, these individuals' enthusiasm and the satisfaction gained from the job
41
42 420 is what enables them to continue to work in PCC.
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48
49 422 The importance of having a good support network outside of work was deemed to be integral
50
51 423 to ensuring optimal wellbeing is maintained. For some this included gardening, for others it
52
53 424 meant spending time with their families and for others this was provided by their own
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55 425 personal faith belief system. It is widely evidenced that having good support networks and
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57 426 recreational activities outside of work can ensure good wellbeing is maintained^{30 31}. Recent
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3 427 research surrounding social prescribing has identified benefits of ‘prescribing’ social
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5 428 activities and local groups in the alleviation of symptoms associated with depression^{32 33}.

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10 430 Working in PCC requires one to work as part of a team³⁴. For the participants in this study,
11
12 431 they were able to clearly articulate the importance of the wider team in PCC³⁵⁻³⁷. Consultants
13
14 432 were able to identify that the nursing team is crucial and the impact that having a nursing
15
16 433 workforce that is ‘unstable’ and changeable can have on their own wellbeing. However,
17
18 434 individuals also identified that the support for the team can also have an impact on their
19
20 435 wellbeing as it can result in feelings of not wanting to cause more work for colleagues. This
21
22 436 then results in individuals taking on extra shifts or not taking a break from work when
23
24 437 perhaps they need the opportunity to be away from work. This sense of duty and care for one
25
26 438 another is highly evidenced in occupations ^{38 39}, particularly when the teams are cohesive and
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28 439 this data indicates there is a clear sense of comradery within the consultant staff group in each
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31 440 unit.

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37 442 Interestingly, participants were able to vocalise without being prompted that the support that
38
39 443 is offered by the wider NHS Trusts and Health Boards is insufficient and not appropriate for
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41 444 their needs. Staff stated that the services they offer are inaccessible due to shift patterns and
42
43 445 needing to be on the unit. Participants were also aware of the efforts that their respective
44
45 446 Trusts and Boards put into wellbeing but highlighted that perhaps outside of PCC, the work
46
47 447 that PCC does remains unclear meaning the services they provide are not appropriate.
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49 448 Consultants want more and need more than sign posting to organisations. While some
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51 449 recognise this is challenging there was a sense that support offered by Trusts and Boards was
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53 450 insincere and not sustainable for PCC staff.

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3 452 One of the limitations of this study is the small sample size, and not every UK PCC unit was
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5 453 represented. However, findings resonated with members of PCC Society and other research
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7 454 in UK PCC units. Further work in UK and overseas PCC units is required to confirm our
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9 455 findings. A key strength of this study is that the individuals who participated ranged in their
10
11 456 experience as a PCC consultant and this ensured the sample was representative across levels
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13 457 of consultant expertise.
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19 459 **Clinical Implications**

20
21 460 The problem of burnout among doctors has been recognised by the UK government⁴⁰ and the
22
23 461 General Medical Council (GMC) and the issue of poor wellbeing has been prioritised in the
24
25 462 NHS Health and Wellbeing Framework⁴¹. Despite this acknowledgement of the problem,
26
27 463 there remains very little research taking a solution-focused approach to provide evidence-
28
29 464 based interventions to support the wellbeing of staff generally, and nothing to date which
30
31 465 focuses on PCC consultants. Our research has indicated that current wellbeing offerings from
32
33 466 Health Trusts/Boards do not meet the needs of consultants. Furthermore, they are designed to
34
35 467 help support staff in crisis rather than prevent those crises from happening.
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42 469 Individual and systemic interventions are required to develop resilient *systems* within which
43
44 470 *individuals* feel psychologically secure to express their concerns and vulnerabilities and are
45
46 471 supported to improve their wellbeing. The GMC report⁴¹ and this study supports the
47
48 472 psychological theory of self-determination⁴² as a way of understanding the basic
49
50 473 psychological elements of wellbeing, i.e. what is required for consultants to experience
51
52 474 wellbeing at work. These are: *autonomy*, *belonging* and *competence*. In line with the GMC
53
54 475 report, this study identified that consultants need to be felt heard, to be given a voice to
55
56 476 express what would improve their wellbeing (*autonomy*); teamwork and a nurturing culture
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3 477 foster an environment in which consultants are able to flourish (*belonging*); and the workload
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5 478 needs to be realistic and achievable in order for consultants to feel competent (*competence*).
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10 480 More specifically, this study has identified an urgent need for PCC units and Health
11
12 481 Trusts/Boards to work alongside senior policy makers to ensure that each member of the
13
14 482 workforce is valued regardless of their age and that an individual's wellbeing is not
15
16 483 compromised, whilst also not compromising the care provided to patients. Trusts/Boards and
17
18 484 PCC units need to work together to ensure that wellbeing opportunities are accessible and
19
20 485 available to all staff regardless of the shift patterns they work. While consultants recognised
21
22 486 the need to improve their wellbeing, they were unsure how to achieve this. There was clear
23
24 487 disdain for the offer of yoga; something more substantial was required. Where there was a
25
26 488 psychologist on the PCC unit, this was greatly appreciated, but a desire for a drop-in service
27
28 489 24-7 was expressed. Perhaps the inclusion of a conversation about wellbeing, where
29
30 490 consultants are invited to discuss their experiences of burnout and moral distress, would be
31
32 491 welcomed. This could form part of doctors' appraisal process and even GMC registration.
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40 493 In addition, there urgently now needs to be focused attention on the longer-term planning for
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42 494 the ageing consultant workforce. In line with the GMC and BMA guidance this study
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44 495 recommends a review of current rota and shift patterns and the piloting of new systems which
45
46 496 would enable consultants to continue to practise as they age, while accommodating their need
47
48 497 to work fewer on-call shifts, and their desire to mentor junior staff coming through. This may
49
50 498 reduce the number of consultants choosing to retire early because they can no longer cope
51
52 499 with the work schedules.
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58 501 **Future research**
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3 502 Future research needs to look toward implementing and evaluating evidence-based
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5 503 interventions designed to improve staff wellbeing. Psychological measures will be required to
6
7 504 determine the impact of those interventions on staff burnout and wellbeing. Furthermore, the
8
9 505 impact of improved PCC consultant wellbeing needs to be measured in terms of staff
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11 506 retention, sickness, and numbers leaving the speciality and the profession^{23 24}.
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15 507

17 508 **Conclusion**

19 509 To conclude, the findings from this study clearly indicate that consultants working in PCC
20
21 510 face a number of challenges to their wellbeing. Current offerings to improve wellbeing do not
22
23 511 meet consultants' needs. There are some identifiable factors which need to be tackled, e.g.
24
25 512 rotas and shift patterns, especially considering the ageing consultant workforce. Our study
26
27 513 supports the findings of the GMC report and other research which has identified the ABC of
28
29 514 doctors' core needs: autonomy, belonging and competence. Evidence-based interventions to
30
31 515 improve consultant wellbeing need to be developed and systematically evaluated to
32
33 516 determine how to improve consultant wellbeing and reduce the levels of burnout and
34
35 517 compassion fatigue among PCC consultants.
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40 518

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45
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47
48 522 participants for this project. Finally, the study authors wish to thank each participant that
49
50 523 kindly took part.
51
52

53 524 **Contributor statement**

54 525 RM, PD, RS, and SS conceptualised the study. RS managed the project as academic
55
56 526 supervisor to SS. RM and PD provided clinical supervision. IB supported RS in project
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527 management. SS collected the data. SS and IB led the data analysis with contributions from
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530 Competing interests

531 There are no conflicts of interest.

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538 Data sharing statement

539 All data that is available is included in article.

540 Ethics agreement statement

541 This study involves human participants and was approved by the Aston University Research
542 Ethics Committee (ref: Psych 200248747).

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COREQ (COnsolidated Criteria for Reporting Qualitative research) Checklist

Developed from: Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International journal for quality in health care*, 19(6), 349-357.

A checklist of items that should be included in reports of qualitative research. You must report the page number in your manuscript where you consider each of the items listed in this checklist.

Topic	Item Number	Guide Questions/Descriptions	Comments	Page Number reported on
Domain 1: Research team and reflexivity				
<i>Personal characteristics</i>				
Interviewer/facilitators	1	Which author/s conducted the interview or focus group?	SS conducted the interviews	4
Credentials	2	What were the researchers' credentials? E.g., PhD, MSc	SS is an MSc student, RS is a health psychologist, RM is an advanced nurse practitioner, PD is a medical consultant in critical care and IB is a psychology researcher with a PhD and MSc.	4, 5,6
Occupation	3	What was their occupation at the time of the study?	SS is an MSc student, RS is a health psychologist, RM is an advanced nurse practitioner, PD is a medical consultant in critical care and IB is a psychology researcher with a PhD and MSc.	4,5, 6
Gender	4	Was the researcher male or female?	PD is male, IB, SS, RM, and RS are female	6
Experience and training	5	What experience or training did the researcher have?	SS who conducted the interviews received appropriate training in conducting qualitative interviews through RS and IB	4
<i>Relationship with participants</i>				
Relationship established	6	Was a relationship established prior to study commencement?	SS established rapport and potential participants through initial consent electronically and information process prior to individuals taking part in the interview	4

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Participant knowledge of the interviewer	7	What did the participants know about the researcher? E.g., personal goals, reasons for doing the study	The participants were all aware that SS was a MSc student at Aston University and this study was part of this MSc.	4
Interviewer characteristics	8	What characteristics were reported about the interviewer/facilitator?	SS had no experience in conducting research on PCC	4
Domain 2: Study design				
<i>Theoretical framework</i>				
Methodological orientations and theory	9	What methodological orientations was stated to underpin the study?	Inductive thematic analysis was used to examine the data	5
Participant selection				
Sampling	10	How were participants selected? E.g., purposive, convenience, consecutive, snowball	Convenience and purposive sampling	3
Method of approach	11	How were participants approached? E.g., face to face, telephone, mail	Online on social media, and through word of mouth	4
Sample size	12	How many participants?	11	7
Nonparticipation	13	How many people refused to participate or dropped out?	N/A	n/a
<i>Setting</i>				
Setting of data collection	14	Where was the data collected? E.g., home, clinic, workplace	Data was collected over video technology and the participants took part from their place of work and their homes.	4
Presence of non-participants	15	Was anyone else present besides the participants and researchers?	In all interviews only the participants were present. For those conducted in place of work there may have been people present in the room, but all participants used headphones if this occurred therefore only participants could hear the interviewer.	4
<i>Descriptive of sample</i>	16	What are the important characteristics of the sample?	All participants had to be currently working as consultant in a PCC unit within the U.K and had to be willing to take part in an online interview	3
<i>Data collection</i>				
Interview guide	17	Were questions, prompts, guides provided by the authors?	The topic guide was constructed by PD, RM , RS, SS based on their own clinical experiences and on the current research field.	4
Repeat interviews	18	Were repeat interviews carried out?	N/A	n/a

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Audio/visual recording	19	Did the research use audio or visual recording to collect data?	Yes, audio and visual platforms were used to collect data.	4
Field notes	20	Were field notes made during and/after the interview or focus group?		
Duration	21	What was the duration of the interviews?	Thirty minutes to 1hr 30 minutes	7
Data saturation	22	Was data saturation discussed?	Yes, and data collection finished once data saturation had been reached	4
Transcript returned	23	Were transcripts returned to participants for comments and correction?	Yes, all transcripts where participants agreed to see their transcripts, were returned to participants prior to data analysis	4
Domain 3: analysis and findings				
<i>Data analysis</i>				
Number of data coders	24	How many data coded the data?	Initially IB coded the data, RM, PD, RS, SS commented on the analysis as the different stages independently.	5
Description of the coding tree	25	Did authors provide a description of the coding tree?	The authors did not provide a conceptual description of the coding tree.	n/a
Derivation of themes	26	Were themes identified in advance or derived from the data?	Themes, as is the framework, for conducting inductive thematic analysis were derived from the data solely.	5,6
Software	27	What software if applicable was used to manage the data?	IB used NVivo to manage the data	5
Participant checking	28	Did participants provide feedback on the findings?	No.	n/a
<i>Reporting</i>				
Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? E.g., a participant number?	Yes, participant quotes were used to illustrate the themes that were found in the data. This is a crucial part of thematic analysis.	8- 16
Data and findings consistent	30	Was there consistency between the data presented and the findings?	Yes, and this was achieved by ensuring that each theme was illustrated with a relevant quotation. Throughout the study in the results section, quotations from a number of participants are present	8-16
Clarity of major themes	31	Were major themes clearly presented in the findings?	These are clearly highlighted in a table but	8-16

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			also depicted within the text.	
Clarity of minor themes	32	Is there a description of diverse cases or discussion of minor themes?	The results section and discussion focus on the eight major themes. There are no minor themes as the major themes illustrate the themes that occurred within these.	8-16

For peer review only

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A qualitative study exploring the wellbeing experiences of Paediatric Critical Care consultants working in the UK during the COVID-19 pandemic

Isabelle Butcher^a, Sumayyah Saeed^b, Rachael Morrison^c, Peter Donnelly^d and Rachel Shaw^{b*}

Affiliations

^aDepartment of Psychiatry, University of Oxford, Oxford, UK.

^bInstitute of Health & Neurodevelopment, College of Health and Life Sciences, Aston University, Birmingham, B4 7ET, UK.

^cPaediatric Intensive Care Unit, Birmingham Women's and Children's NHS Foundation Trust, Steelhouse Lane Birmingham B4 6NH, UK.

^dPaediatric Intensive Care Unit, The Royal Hospital for Children, Glasgow, G51 4TF, UK.

*Corresponding author r.l.shaw@aston.ac.uk

Abstract

Objectives: The aim of this study was to examine the wellbeing experiences of consultants working in Paediatric Critical Care (PCC) settings within the United Kingdom (UK).

Design: Qualitative design

Setting: Paediatric critical care

Participants: 11 medical consultants working in PCC in a range of PCC settings/transport teams in the UK from nine units participated. Participants ranged in years of experience as a consultant from four to 23 years.

Methods: A set of open semi-structured questions were used to elicit information about participants' experiences of compassion fatigue and burnout, and their wellbeing more broadly. Interviews were audio recorded and transcribed.

Findings: Thematic analysis identified six themes. These were: i) *positive and negative impact of working during COVID-19*, ii) *job satisfaction and public scrutiny in the unique environment of PCC*, iii) *supporting the workforce through modified shift work*, iv) *perceptions of support and recognition offered from the hospital management*, v) *successful coping strategies are personal and adaptive*, and vi) *importance of civility and good teamwork*

Conclusion: We have provided insight into PCC consultants' wellbeing experiences. Increasing difficulties with on-call and night shifts as one ages were reported. Action on shift patterns is needed to protect and retain this expert workforce. Consultants stated that hospital management teams could do more to provide accessible wellbeing interventions, tailored to their needs. Where funded PCC psychology posts existed, they were greatly appreciated. Our work corroborates the recent General Medical Council report highlighting doctors' core needs for wellbeing: autonomy, belonging, competence. Burnout is a long-term problem, requiring sustainable solutions. Evidence-based interventions to improve consultants' wellbeing need to be evaluated to determine how we can best support this PCC workforce.

Key words: *intensive care units, pediatric; consultants; burnout, professional; COVID-19; qualitative research*

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Strengths and Limitations

- A key strength to this research is its exploratory design. With very little previous research describing the quality of consultants' experiences of burnout and compassion fatigue, this study offers unique insight.
- Individual interviews were conducted with consultants, which were led by their own experiences and what mattered to them, rather than being led by predetermined theory.
- We applied Yardley's quality criteria to ensure the research was undertaken to the highest possible standards.
- Consultants participated from nine paediatric critical care units and therefore in this study, not all units were represented. Further research in other units and across the international field of paediatric critical care would help strengthen the findings.

55 **Introduction**

56 Working in paediatric critical care¹ (PCC) is stimulating and rewarding however healthcare
57 professionals working in PCC are exposed daily to traumatic events and stressful situations.
58 In addition, the workload within PCC is often consultant led and consultant delivered with a
59 significant on call requirement. Working in PCC can be stressful due to the intensity of the
60 work, emotional and moral distress.^{1 2} It is unsurprising therefore that research globally has
61 shown that individuals working in PCC experience high rates of burnout, compassion fatigue
62 and symptoms associations with posttraumatic stress disorder (PTSD)³⁻⁵. Continual exposure
63 to patient and family distress can be emotionally taxing for healthcare professionals working
64 in PCC.

65
66 In recent years prior to COVID-19 pandemic there has been a surge of evidence highlighting
67 that poor wellbeing amongst staff working in PCC is a persistent problem. The literature to
68 date has largely focused on nursing staff and trainee medical professionals.^{6 7} The COVID-19
69 pandemic has unsurprisingly had wide reaching impact on the health and wellbeing of
70 healthcare professionals due to the additional stressors and uncertainties experienced.⁸⁻¹²
71 Furthermore within the current research field there is a lack of research that is solution
72 focused. This research is compelling and highlights the issues that these healthcare
73 professionals face working in PCC. There is a paucity of evidence with consultants in PCC
74 who face unique challenges; they are required to manage staff and support a wider team, as
75 well as having to make critical clinical decisions, often as the most senior member of a team.
76 To date, the research has predominantly focused on measuring the pathologies of burnout,
77 posttraumatic stress, compassion fatigue and moral distress using standardised measures^{2 13}.

¹ The authors note that PIC and PCC are used interchangeably, for this study PCC is used to encompass high dependency units (HDU), and transport teams.

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2
3 78 Whilst this research is important^{3 14} it does not give a ‘full’ picture of healthcare
4
5 79 professionals’ experiences at work, e.g. how their burnout makes them feel or how they
6
7 80 perceive it impacts on their ability to perform. Furthermore, research to date has focused on
8
9 81 measuring the size of the problem rather than looking toward finding solutions with little
10
11 82 research solution focused. ¹⁵
12
13
14
15 83

16
17 84 The paucity of research focusing on medical consultants working in PCC means little is
18
19 85 known about this important staff group. This study aimed to explore UK PCC consultants’
20
21 86 experiences of burnout and compassion fatigue with a view to understanding how their
22
23 87 wellbeing may be improved.
24

25
26 88 The research questions were:

- 27
28 89 1. What challenges to their workplace wellbeing do PCC consultants experience?
29
30 90 2. What factors support PCC consultants’ wellbeing at work?
31
32

33
34 91

35 36 92 **Method**

37 38 93 **Design**

39
40 94 This study adopted an exploratory, qualitative design to elicit responses to questions around
41
42 95 participants’ experiences of burnout, compassion fatigue, and wellbeing. This design allows
43
44 96 individuals to freely articulate their thoughts, without the researcher being prescriptive. This
45
46 97 means data collection is more dynamic, with the participant leading on what matters to them,
47
48 98 rather than the researcher making assumptions.^{16 17} The consolidated criteria for reporting
49
50 99 qualitative research (COREQ¹⁸) guidance was followed in the reporting of the study.
51
52
53
54

55 100

56 57 101 **Sample**

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1
2
3 102 This study was set within paediatric critical care units in the UK. Eligible participants were
4
5 103 consultants in PCC units and/or Transport teams in the UK.
6
7

8 104

9
10 105 Convenience and purposive sampling were adopted to ensure that all consultants at each UK
11
12 106 PCC unit had the opportunity to participate if they would like to as well as ensuring
13
14 107 representation in the sample from consultants with different years of experiences.
15
16

17 108

19 109 **Procedure**

20
21 110 The study received ethical approval from Aston University Research Ethics Committee and
22
23 111 permission was granted by the President of the Paediatric Critical Care Society to invite their
24
25 112 members to participate. The study was advertised through the PCC Society and on social
26
27 113 media during April to June 2021 and volunteers were invited to contact the research team.
28
29

30 114 This study formed part of one author's (SS) MSc.
31
32

33 115

34
35 116 Once participants had contacted the researcher, they were sent a Participant Information
36
37 117 Sheet and consent form, which could be completed electronically via Qualtrics. Participants
38
39 118 were then invited to take part in an online semi-structured interview. All interviews were
40
41 119 conducted by an independent researcher (SS), who had no previous experience of PCC and
42
43 120 was not connected to any of the participating units, Trust or Health Boards. The topic guide
44
45 121 was informed by existing literature as well as discussions with an advanced nurse practitioner
46
47 122 (RM), a medical consultant (PD), and a health psychologist (RS). The topic guide was semi
48
49 123 structured in with a set of topics and questions but was conducted in a manner that allowed
50
51 124 participants to clearly articulate their thoughts and experiences. Prior to being used the
52
53 125 interview guide was shown and discussed with colleagues working in critical care to ensure it
54
55 126 flowed and the topics were appropriate. SS was trained in conducting qualitative interviews
56
57
58
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1
2
3 127 by IB and RS to ensure that appropriate questioning, intonation, and prompts used were
4
5 128 appropriate.

6
7
8 129
9
10 130 Following completion of the interview, participants were sent a debrief form which
11
12 131 signposted them to organisations that offer additional support to improve healthcare
13
14 132 professional wellbeing. Recruitment ceased once data saturation had been reached. All
15
16 133 interviews were audio-recorded, transcribed, and stored on a secure online drive. Identifiable
17
18 134 information was removed to protect participants' anonymity. Each participant was sent their
19
20 135 anonymized transcript within two weeks of taking part in the study to enable them to omit
21
22 136 and/or change information in the transcript to ensure they were happy for it to be used as part
23
24 137 of the analysis of this study. Clinical colleagues in the research team did not have access to
25
26 138 the transcripts to further protect participants' anonymity.

27
28
29 139
30
31 140 A distress protocol was used throughout this study to ensure appropriate safeguarding was in
32
33 141 place should any issues of concern for participants or their colleagues be raised. No such
34
35 142 issues were raised during the study.

36
37
38 143
39
40 144 Each interview lasted between thirty minutes and one hour and 30 minutes.

41
42
43 145

44 45 146 **Demographic data**

46
47 147 Self-report information on the following demographic variables were obtained: age, gender,
48
49 148 ethnicity, years of experience as a consultant in PCC.

50
51
52 149

53 54 150 **Thematic data analysis**

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1
2
3 151 Data was analysed using inductive thematic analysis which offers a flexible process enabling
4
5 152 the exploration of rich data efficiently.¹⁹ An inductive approach was taken meaning theme
6
7
8 153 generation was led by the participants' accounts rather than any predetermined assumptions.
9
10 154 A six-step approach to analysing the data was used as outlined below using Braun and
11
12 155 Clarke's methodology¹⁹. SS and IB collected the data and led the analysis of the raw data;
13
14
15 156 both were independent of any PCC units. All the authors took part in steps 4 – 6.

- 17 157 1. Data were transcribed verbatim by the researcher (SS).
- 18
19 158 2. The transcripts were read and re read by members of the research (SS and IB) team to
20
21 159 enable familiarisation with the data. Interviews were electronically placed into NVivo
22
23 160 qualitative software to enable the data to be organised systematically.
- 24
25
26 161 3. Systematic line by line coding was conducted to identify common themes within the
27
28 162 data (SS and IB).
- 29
30
31 163 4. The themes were discussed within the whole research team to identify key common
32
33 164 themes across the interviews enabling a thematic map to be constructed. Any
34
35 165 differences in themes were discussed by all authors.
- 36
37
38 166 5. The themes were finalised, defined, and names generated.
- 39
40 167 6. The final themes were checked with all members of the research team.

168

169 Quality and rigour

170 To ensure that rigour was maintained throughout the completion of this study, the research
171 team followed Yardley's²⁰ quality criteria for qualitative research ensuring the study was
172 sensitive to the context being studied, the methods were rigorous, our reporting of the study
173 was transparent and coherent, and the impact of the work was conveyed.

174

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1
2
3 175 It is acknowledged that each author's experiences inevitably shape data analysis.²¹ The
4
5 176 researchers (SS and IB) were not previously known to any of the participants. It is important
6
7 177 to note that the lead author (IB) is a female psychology postdoctoral researcher with
8
9 178 experience in conducting research with individuals with severe mental illness. SS is a female
10
11 179 MSc student with experience in conducting qualitative interviews. RM is a female advanced
12
13 180 nurse practitioner with over twenty-five years' experience of working in the National Health
14
15 181 Service (NHS). PD is a male medical consultant in PCC with over thirteen years' experience
16
17 182 of working in the NHS. RM and PD currently work in (different) PCC units and have
18
19 183 published qualitative and quantitative research over the last ten years within the critical care
20
21 184 research field. RS is a female Health Psychologist with expertise in qualitative methodology
22
23 185 and healthcare intervention development and evaluation. She has over twenty years'
24
25 186 experience of conducting applied clinical research with a range of populations in primary and
26
27 187 secondary care and in the community.
28
29
30
31
32

33 188

189 Patient and Public Involvement

37 190 Key stakeholders were involved in the conceptualisation of the study. Through the PCC
38
39 191 Society, medical and nursing staff in UK PCC units were able to provide feedback on the
40
41 192 design of the study, research questions, and methods used. Findings were presented to PCC
42
43 193 Society and feedback gathered, which has informed the writing of this report.
44
45
46
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48

194

195 Findings

51
52 196 Eleven PCC consultants took part in this study from April to June 2021. All 11 consultants
53
54 197 who participated work in PCC units that are consultant led services with on call
55
56 198 commitments. Individuals ranged in age from 42 to 56. Of these 11 individuals, five were
57
58
59
60

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199 male and six were female. The years of experience as a PCC consultant ranged from 4 to 23
 200 years. Participants were recruited from 9 UK-based PCC units.

201

202 The nine PCC units that participants worked in varied in terms of size and patient cohort.

203 They included both cardiac intensive care units, general intensive care units and mixed units.

204 specialities.

205

206 Thematic analysis generated six themes representing consultants' experiences of burnout,

207 compassion fatigue, and wellbeing (see Table 1). Despite working in a highly stimulated and

208 challenging environment all PCC consultants who took part were able to reflect on what

209 solutions need to be implemented to promote consultant wellbeing.

210 **Table 1: Themes identified**

211

Themes
1. Positive & negative impact of working during COVID-19
2. Job satisfaction & public scrutiny in the unique environment of PCC
3. Supporting the workforce through modified shift work
4. Perceptions of support and recognition offered from hospital management
5. Successful coping strategies are personal & adaptive
6. Importance of civility & staff retention for good teamwork

218

219 ***Theme 1: Positive and negative impact of working during COVID-19***

220 PCC consultants in this study recalled the anxiety they felt at the beginning of the pandemic,

221 which for some, interrupted their sleep and pervaded thoughts about their working practice.

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1
2
3 222 “at the very beginning where there was a great unknown, and we were all watching what was
4
5 223 coming...there was a lot of anxiety and a lot of fear through that, erm trying to figure out
6
7 224 how we could cope and adapt to that...[I never have] problems getting to sleep and I was
8
9 225 lying in bed worrying, waking up early and worrying, erm, waking up and trying to prepare
10
11
12 226 and plan” [Participant 1009]

13
14 227 For others, it affected their close personal relationships by preventing well-established
15
16 228 childcare routines, for instance, or making it impossible to pursue “normal” activities
17
18 229 typically undertaken to boost one’s wellbeing.

19
20
21 230 “there’s a few things that really did impact my wellbeing, I think. The inability to have
22
23 231 grandparents come and just spend some time with the kids, and to you know provide a bit of
24
25 232 respite and childcare. And they don’t do it a lot, but that has definitely impacted. The
26
27 233 inability to see friends, socially which is you know my world...the normal stuff that I do that
28
29 234 maintains my wellbeing- that’s been a big impact. And, you know the other thing has been my
30
31 235 [partner] has been working from home, er for the last sort of 18 months now nearly, which
32
33 236 you know is not [their] choice and you know we’ve had to adapt to that as well” [Participant
34
35
36
37 237 1001]

38
39
40 238 One of the key changes experienced by consultants in this study between the first and second
41
42 239 waves of the pandemic was a shift from a sense of public goodwill in the first wave toward a
43
44 240 feeling of frustration in the second. This frustration was brought about, among other things,
45
46 241 by members of the public not wearing masks and not adhering to social distancing rules on
47
48 242 public transport.

49
50
51 243 “there was a lot of good feeling and public support in the first wave and by the second wave
52
53 244 you know I was going on the train and people were not wearing their masks and you know
54
55 245 would just drive me absolutely potty. And if you asked them to put their mask on...it only ever
56
57 246 led to confrontation and it was just ugh this is just misery, utter misery” [Participant 1004]
58
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60

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1
2
3 247 A key change for consultants working in PCC during the COVID-19 pandemic was having to
4
5 248 respond to the significant demand to care for critically ill adults with COVID-19. Some PCC
6
7 249 units were repurposed to accommodate adult COVID-19 patients and in other areas PCC staff
8
9 250 were redeployed to local adult Intensive Care Units (ICUs) to meet the demand. For some,
10
11 251 this was a sudden change and one which meant working with a very different patient group.

12
13
14 252 *“in the first wave were given [extremely short] notice to close down our PICU, move all our*
15
16 253 *patients out and then transform into an adult intensive care unit, which we did...My smallest*
17
18 254 *patient in the last month has been 600 grams. My patients, during covid, were typically*
19
20 255 *greater than 120 kilograms. So, a very different population”* [Participant 1004]

21
22
23 256 It is clear that PCC consultants experienced anxiety in response to the pandemic, which for
24
25 257 some, was coupled with significant changes to their practice. The pandemic was almost a
26
27 258 double hit for participants due to the changes at work taking away those opportunities for
28
29 259 informal communication with colleagues and being unable to see friends and family outside
30
31 260 of work.

32
33
34 261 Nevertheless, participants were also able to clearly identify unexpected positive
35
36 262 consequences of the COVID-19 pandemic. In particular, they appreciated the flexibility with
37
38 263 remote attendance at meetings, rather than having to go to the hospital on days off.

39
40
41 264 *“Yeah, it made me much happier.... because like you didn't have to go to work anymore, all*
42
43 265 *of a sudden, instead of like dragging yourself in for pointless rubbish, you know meetings or*
44
45 266 *whatever, all of a sudden you're like well why don't we do this all online so you can now live*
46
47 267 *your life, attend the meetings you need to attend without attending you know”* [Participant

48
49
50 268 1005]

51
52
53 269 This may not sound so significant, but it was important to PCC consultants in this study.
54
55 270 Often it was necessary to schedule activities such as meetings in their non-clinical time,
56
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1
2
3 271 which often included their days off. Remote attendance provided some respite and was less
4
5 272 intrusive on their life outside of work.
6
7

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9

10
11 274 ***Theme 2: Job satisfaction & public scrutiny in the unique environment of***
12
13
14 275 ***PCC***
15

16
17 276 While the pandemic threw up new challenges, it was clear that PCC consultants are used to
18
19 277 working in an environment which is both stimulating and challenging; that is often where
20
21 278 their sense of job satisfaction comes from. However, some of these challenges can be
22
23 279 significant and bring about experiences of moral distress. Consultants shared their
24
25 280 experiences of moral distress, which often were connected to the unique environment of
26
27 281 PCC, which deals with emergent and critical care of infants and children. This brings with it a
28
29 282 degree of public scrutiny. Some PCC consultants in this study felt the weight of public
30
31 283 expectation due to increased media coverage, and thus, scrutiny of the care they provide.
32
33

34
35
36 284 *I think society has changed on all the sort of you know the very, widely publicised cases that*
37
38 285 *have been in the news and things so it's sort of become doctors versus parents. And it's awful*
39
40 286 *because well you actually want the same thing. We all want the right thing for the child, and*
41
42 287 *it might not be you know immediate. But you know nobody wants who lose a child and I can't*
43
44 288 *put myself in the parent shoes in that situation, because no one wants their child to suffer for*
45
46 289 *no reason. And I think that's, that's the biggest challenge what we do day in day out. Um, I*
47
48 290 *think you know the easy thing do is send a child to intensive care, but it doesn't mean that it's*
49
50 291 *the right thing. Because in 5 minutes I can put a tube down I can put lots of lines in, the hard*
51
52 292 *thing is the very long conversation about really what is right and, and you know for that child*
53
54 293 *and that family ..and I have that every week. It's not something that happens once in a blue*
55
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294 *moon that happens every week sometimes, sometimes three times a week. on that must be*
295 *happening across every PICU in the UK. [Participant 1003]*

296 Sometimes making these incredibly complex, life and death decisions, requires court
297 appearances for consultants (and others), which come with a significant sense of duty to the
298 patient.

299 *“Before I go to the court for any coroner’s inquest I feel that oh my god I wish I didn’t have*
300 *to do this...I go anyway regardless...That is the bit it’s not dread I don’t how to describe that*
301 *feeling but it’s er not a nice feeling but I just tell myself I have to do this, finally I’m doing*
302 *this for the child....I also remind myself that it’s my duty to do this and be present”*

303 [Participant 1010]

304 Alongside this, is the increased complexity of patients now seen in PCC.

305 *“60% of the children that come through the doors through PICU in the UK, are life limited.*
306 *And over the last year in our unit that has become 90-100%. Um and we have had fewer and*
307 *fewer of fit and well children. Um so that is challenging.” [Participant 1002]*

308 These extracts demonstrate the moral distress sometimes experienced by PCC consultants.

309 Not only are there difficult decisions to be made, but they feel “*hamstrung*” (Participant
310 1002) due to the demands of patient confidentiality, set against the increased media coverage
311 of individual cases sometimes instigated by families.

312 *“We can’t discuss cases...but actually once the families start releasing that information then*
313 *you can because I say it’s not us that’s done that” [Participant 1002]*

314 Nevertheless, whilst participants recognised these challenges, all individuals without
315 hesitation were able to identify what gives them satisfaction as a PCC consultant. For some
316 this was teaching other healthcare professionals, for others it was interacting with the patients
317 and their families.

RUNNING HEADER: WELLBEING EXPERIENCES OF PCC CONSULTANTS

1
2
3 318 *“Definitely spending time with families, you know supporting families through you know*
4
5 319 *the... the hardest times of their lives and making a difference to them. Erm... I think that’s*
6
7
8 320 *probably the most satisfying thing”* [Participant 1003]
9

10
11 321 *“The other thing I get a lot of satisfaction from personally is teaching the junior doctors. You*
12
13 322 *know they get a real buzz of learning to do the practical things or learning how to deal with a*
14
15 323 *new sick patient, and I really enjoy that aspect of it.”* [Participant 1005]
16

17
18 324 Participants were able to share their own experiences of moral distress and how in recent
19
20 325 years their respective units have seen a shift in the population that they are treating.
21
22 326 Individuals also reflected that working in PCC involves working under public scrutiny.
23
24 327 Despite these sometimes excessively high expectations from the public about what is possible
25
26 328 in PCC, participants were able to clearly express that being a PCC consultant came with high
27
28 329 levels of job satisfaction; the unique challenges faced in PCC are also what provide
29
30 330 stimulation and fulfilment.
31
32
33
34

35 331

36
37
38 332 ***Theme 3: Supporting the workforce through modified shift work***
39

40
41 333 PCC consultants in this study described growing challenges related to staffing, managing
42
43 334 shift work, and the ageing workforce.

44
45 335 *“I think better resourcing [is needed] so that we don't feel like we are not doing a good job*
46
47 336 *because we feel like you know... sometimes there are 24 patients on the unit built for 18 and*
48
49 337 *there still are only 2 consultants and you just can't do the job you want to do”* [Participant
50
51
52 338 1008]
53
54

55
56 339 This volume of work is contrasted against the restricted availability of the workforce and the
57
58 340 organisation of that workforce, in terms of shift management.
59
60

RUNNING HEADER: WELLBEING EXPERIENCES OF PCC CONSULTANTS

1
2
3 341 The consultant below highlights the potential impact of consultant fatigue, which in their
4
5 342 assessment, could be prevented by different shift patterns.

6
7 343 *“A rota that doesn’t involve a 24-hour shift where potentially I could be awake for the entire*
8
9 344 *time and you could kill someone at hour 23, and you’d feel bad about that...but the risk of*
10
11 345 *being tired and then making a mistake, knowing that you made that mistake because you were*
12
13 346 *tired not because you didn’t have the knowledge or you didn’t realise what was going on.*
14
15 347 *You know we all make mistakes all the time, um but some mistakes can be prevented, and*
16
17 348 *some mistakes can’t be prevented, and if you can prevent a mistake, then you should and I*
18
19 349 *think that fatigue is something that should be prevented, because it’s so well recognised”*

20
21
22 350 [Participant 1006]

23
24
25 351 This becomes increasingly important as PCC consultants age. Some participants voiced a
26
27 352 concern that as one gets older it becomes harder to work at the pace that one was doing when
28
29 353 they were newly qualified. Individuals reflected on their desire to work in a different way to
30
31 354 when they were younger.

32
33
34 355 *“I think that’s something that needs to be looked at, such as session planning and planning*
35
36 356 *for all the older and more experienced consultants and how you can use their skills within a*
37
38 357 *department and that maybe doing slightly less acute stuff and actually valuing that*
39
40 358 *contribution as much as valuing the person who is up all night”* [Participant 1007]

41
42
43 359 There are clearly systemic challenges faced by PCC consultants in this study relating to the
44
45 360 available workforce and the changes in demographics of that workforce. These are issues
46
47 361 requiring hospital management input. The next theme identifies other issues the PCC
48
49 362 consultants in this study wished to raise about supported provided by their respective
50
51 363 management teams.

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3 365 ***Theme 4: Perceptions of support and recognition offered from hospital***
4
5
6 366 ***management***
7
8

9 367 All consultants in this study perceived that wellbeing support provided by their hospital
10
11 368 management teams was inadequate. Participants reflected on the creative wellbeing
12
13 369 opportunities offered to staff such as the provision of yoga sessions, which were not always
14
15
16 370 accessible to PCC consultants due to their location and timing.

17
18
19 371 *“Of course, HR provide yoga on a [week day] or whatever they like it’s not practical for*
20
21 372 *most of us who have you know a clinician job, okay, so, I can’t just disappear from the ICU*
22
23 373 *to go and do downface dog for an hour. That’s not reasonable...” [Participant 1003]*

24
25
26 374 Given the challenges to their wellbeing endured during the height of the COVID-19
27
28 375 pandemic described above, it was clear that PCC consultants in this study were not satisfied
29
30 376 that the wellbeing support provided were fit for purpose.

31
32
33
34 377 *“Putting on a yoga class is probably not what people need, what they need is people.... you*
35
36 378 *know we’ve just lost a lot of patients it’s been really sad and what should be done is*
37
38 379 *management to come in and say that must have been really tough what could we do to help?*
39
40 380 *What we get instead is oh well why have all these people died, haha you know, and you know*
41
42 381 *if you looked at this group of patients, they were going to die” [Participant 1003]*

43
44
45
46 382 Yoga and similar activities were not accessible to PCC consultants. Furthermore, they were
47
48 383 perceived as a quick fix which did not provide the recognition they felt was due to them
49
50 384 following the challenges of their working experiences during the pandemic. This was
51
52 385 experienced as a lack of understanding by hospital management about what was required to
53
54 386 improve and sustain the wellbeing of individuals working in PCC. While there was
55
56 387 appreciation for the investment in psychological support for PCC staff, some consultants felt
57
58 388 this was not what they needed.
59
60

RUNNING HEADER: WELLBEING EXPERIENCES OF PCC CONSULTANTS

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2
3 389 “The organisation will ... signpost you to the eyeballs to [laughs] you know, I don’t know,
4
5 390 occupational health, psychological blah, blah... and you know what I’m not interested”

7
8 391 [Participant 1014]

9
10 392 The following extracts provides a good summary of the issues highlighted in this theme.

11
12
13 393 “The [hospital management] look for all the kind of shiny gimmicky ways to just show that
14
15 394 they care, without actually addressing the problem and, so then you’ll have [Trust/Board]-
16
17 395 wide initiatives being placed to, erm, for example, the latest one is all about access to
18
19 396 psychology and things, erm actually a lot of the problems people are facing, are related to
20
21 397 workload and are related to work pressure and system pressure and things like that... Erm,
22
23 398 so but at least then as an organisation, you can say that you care, and you try... so it does
24
25 399 feel a little bit like lip service sometimes, to be honest” [Participant 1006]

26
27
28
29
30 400 It seems that what is required by PCC consultants from hospital management is recognition for
31
32 401 their services during the pandemic and sustainable wellbeing support that is appropriate to
33
34 402 them and accessible to those working on clinical shifts.

35
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38 403

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41 404 ***Theme 5: Successful coping strategies are personal & adaptive***

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43
44 405 As indicated in the previous theme, PCC consultants in this study wanted approaches to
45
46 406 improve their wellbeing that were appropriate and accessible to them. Many were able to
47
48 407 describe their own informal strategies to ensure that they maintain good wellbeing. These
49
50 408 included the use of humour, exercise, having an out of work routine and talking with family.
51
52 409 PCC consultants described how the sense of humour they use is unique to their place of work,
53
54 410 and sometimes is what helps in stressful work situations.
55
56
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RUNNING HEADER: WELLBEING EXPERIENCES OF PCC CONSULTANTS

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3 411 *I don't get angry at work, and I don't get depressed or cry at work...I tend to just cruise on*
4
5 412 *there and get the best done and um make some inappropriate jokes and comments...and*
6
7
8 413 *that's about it really"* [Participant 1001]
9

10 414 Hobbies outside of work were described as beneficial by some individuals.

11
12
13 415 *"I mean outside of the unit it is basically having a full set of things that make me happy...so*
14
15 416 *um spending time with my kids makes me happy.... I've started to learn the cello with my*
16
17 417 *daughter...I also have an allotment and I'll be honest I mainly kill things but it's still quite*
18
19 418 *fun and haha I have grown asparagus this year..."* [Participant 1009]
20
21
22

23 419 Others were a little more philosophical about it and suggested that the most successful
24
25 420 adaptive strategy for them was the realisation that *"I can't control everything"* [Participant
26
27 421 1010].
28
29

30
31 422 *"I am a Christian, I have faith which helps me incredibly because I think there's a purpose er*
32
33 423 *so a child dying for me is not a failure...you know 2 children with the exact same condition*
34
35 424 *that I treated exactly the same and one recovers and the other one dies, it's not my success,*
36
37 425 *it's not my failure. I've played my part to the best of my ability. Yeah, and it's not in my*
38
39 426 *hands so those things, bother me but don't burden me"* [Participant 1013]
40
41
42

43 427 This range of accounts highlights the importance of finding one's own personal strategies for
44
45 428 maintaining wellbeing, both while at work and when outside of work.
46
47

48 429 Indeed, it was clear from participants' accounts that PCC consultants in this study found that
49
50 430 when they experienced stressors both in and outside of work, their wellbeing was further
51
52 431 challenged.
53
54

55
56 432 *"It's like when you're a boxer and you're in the boxing ring and the guy's punching your*
57
58 433 *face and that's work, and you get to the end of the round, and you go home. And when you*
59
60

RUNNING HEADER: WELLBEING EXPERIENCES OF PCC CONSULTANTS

1
2
3 434 *get to your corner, your trainer turns around and starts punching you in the face as well then*
4
5 435 *it's life isn't very fair at those points...And you can see it all starts to fall apart a little bit and*
6
7 436 *you know....how much pressure you are under at home at the moment it would add a huge*
8
9
10 437 *amount to the overall picture” [Participant 1001]*
11
12

13 438 This theme has demonstrated the importance of adaptive strategies for managing wellbeing
14
15 439 and that they need to be personalised to the individual. Furthermore, it has highlighted that
16
17 440 when there are combined stressors from work and outside of work, wellbeing can be
18
19 441 significantly compromised. Some PCC consultants need support in establishing barriers
20
21 442 between work and home life. Moreover, there needs to be a mechanism to communicate those
22
23 443 life events outside of work which can affect one's ability to function at work. This requires
24
25 444 good working relationships.
26
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28
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30 445

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32
33 446 ***Theme 6: Importance of civility & staff retention for good teamwork***
34

35
36 447 As above, PCC consultants recognised the importance of civility within the PCC team.
37
38 448 Creating close relationships with colleagues facilitates better communication and honesty
39
40 449 which can help in situations like those above, when there are multiples stressors.
41
42

43
44 450 *“It is like a team bonding under looking after each other and having a chat with other*
45
46 451 *people, where you find out what going on in their lives, and whether there are other stresses”*
47
48 452 *[Participant 1009]*
49

50
51 453 Furthermore, working in PCC was described as dependent on teamwork, where professionals
52
53 454 from different backgrounds come together to achieve one goal.
54
55

56 455 *“the teamwork in the unit. ICU is not about individuals without the team and our nursing*
57
58 456 *team are phenomenal, erm, so we need them on the work we do.” [Participant 1005]*
59
60

RUNNING HEADER: WELLBEING EXPERIENCES OF PCC CONSULTANTS

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2
3 457 The significance of the team was highlighted further by some due to the “*huge exodus*”

4
5 458 [Participant 1005] of nursing staff they are currently experiencing.

6
7
8 459 “*We’ve got a huge sort of exodus of nursing staff at the moment...and that means that there’s*

9
10 460 *uncertainty in turnover in the nursing staff now, we have no control over that....suddenly*

11
12 461 *there’s more work for everybody else to do as we try and train somebody newer and we try*

13
14 462 *and to get to know somebody new, teams that worked well before don’t work as well for a*

15
16 463 *little while....and everything ‘s just like moving through treacle”* [Participant 1003]

17
18
19
20 464 This poor staff retention has repercussions across the unit with PCC consultants taking on

21
22 465 extra shifts or avoiding taking leave because they do not want to let their colleagues down.

23
24 466 This remains the case even though consultants in this study spoke of how they feel they need

25
26 467 time away from work.

27
28
29
30 468 “*I have considered taking time out from work but felt that I couldn’t do that because of the*

31
32 469 *impact on my colleagues.... we’ve all been through the same experience. So er, so that’s*

33
34 470 *where we are.”* [Participant 1003]

35
36
37
38 471 PCC consultants in this study recognised the important and positive impact of civility and

39
40 472 good teamwork. Working closely together and supporting each other was one of the strategies

41
42 473 used to manage the challenges faced by poor staff retention. Burnout was raised in this

43
44 474 discussion as something experienced due to the challenges in the workforce, but was clearly

45
46 475 something that staff in this consultant’s workplace were able to share with colleagues.

47
48
49
50 476 “*[We’re a] big group of consultants and good group of nursing team and we are very honest*

51
52 477 *and open about [burnout] ...able to talk about it and hold up our hands and say we’re feeling*

53
54 478 *a bit the same and trying to help each other”* [Participant 1008]

55
56
57
58 479 Civil relationships within PCC teams on the unit were described as central to good teamwork,

59
60 480 which was being challenged by poor staff retention, especially among nursing staff. This

RUNNING HEADER: WELLBEING EXPERIENCES OF PCC CONSULTANTS

1
2
3 481 theme relates to others reported. Growing the workforce requires system-level change and
4
5 482 investment. As stated by some PCC consultants in this study, this is not within their gift to
6
7 483 change, so instead they focus on maintaining those civil relationships which create a
8
9 484 supportive culture on the unit.
10
11
12

13 485

16 486 In summary, the themes presented have identified the factors which challenge consultants'
17
18 487 own wellbeing and that of others working in PCC. They have also presented the positive
19
20 488 factors which can help to create a wellbeing-supportive culture in PCC. The first theme
21
22 489 identified the challenges PCC consultants experienced during the COVID-19 pandemic. The
23
24 490 remaining themes cover issues that pre-existed the pandemic and which focus on issues
25
26 491 relating to the unique environment of PCC, how the workforce is structured, stressors in and
27
28 492 out of work, adaptive strategies for maintaining wellbeing and the importance of civility and
29
30 493 good teamwork in maintaining good quality care. PCC consultants' recommendations for
31
32 494 solutions focused on the need to grow and develop the structure of the workforce and how
33
34 495 shift work is organised, including the tapering of on-call shifts as staff age. They wanted
35
36 496 recognition from hospital management and instead of short-term provision of wellbeing
37
38 497 activities, they wanted more sustainable psychological support, e.g. from psychologists, to be
39
40 498 available, ideally without need for referral.
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46 499

50 **Discussion**

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52
53 501 The findings from this unique study provide a clear description of consultants' experiences of
54
55 502 working in PCC, focusing especially on how their wellbeing can be challenged by their work.
56
57 503 One such challenge highlighted in this study is the possibility for consultants to experience
58
59 504 compassion fatigue due to workload pressures and burnout. There is little evidence on the

RUNNING HEADER: WELLBEING EXPERIENCES OF PCC CONSULTANTS

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3 505 nature of compassion fatigue or how we might remedy this, as found by Sinclair and
4
5 506 colleagues in a recent review which recommended further examination and re-
6
7 507 conceptualisation of the concept²².
8
9

10 508
11
12 509 The challenges to wellbeing identified in this study are consistent with the existing literature,
13
14 510 for example it is widely documented that working shifts becomes increasingly harder the
15
16 511 older one gets²³⁻²⁷. It is of particular interest to note that participants were able to pinpoint
17
18 512 how this could be improved, with participants suggesting not having 24-hour shifts and better
19
20 513 planning for consultants as they age. Regardless of their age, consultants considered that they
21
22 514 do not see themselves in this role ‘forever’ with some participants considering alternative
23
24 515 options such as more time spent in education or research. This is not a surprise, and these
25
26 516 findings support the recommendations outlined by the British Medical Association: ²⁸ which
27
28 517 include (but are not limited to): i) ensuring staff are able to change parts of their role through
29
30 518 job planning; ii) consultants are able to work flexibly and where possible remotely; iii)
31
32 519 consultants who are going through the menopause should be adequately supported; and iv)
33
34 520 consultants should feel supported and included in a workplace where mental and physical
35
36 521 wellbeing are prioritised. These findings also support those from previous surveys conducted
37
38 522 by Royal College of Physicians that illustrated that shift patterns were a factor in consultants’
39
40 523 decisions to retire early ^{29 30}. This finding suggests that greater consideration should continue
41
42 524 to be paid to the impact that shift work and taking ‘on call’ shifts can have on a staff
43
44 525 member’s wellbeing. Individual Trusts and Hospital Boards should consider alternative
45
46 526 options for consultants as they age, to ensure that their expertise is valued but that their
47
48 527 wellbeing is not compromised because of their age. This data indicates that at the age of fifty-
49
50 528 five, nights become more challenging with greater recovery time needed post nights.
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RUNNING HEADER: WELLBEING EXPERIENCES OF PCC CONSULTANTS

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2
3 530 Working in COVID-19 has and continues to have a huge impact on healthcare professionals'
4
5 531 wellbeing³¹⁻³⁵. For many healthcare professionals globally, COVID-19 brought uncertainty
6
7 532 and anxiety. Nevertheless, as well as the negative aspects of the pandemic, participants in this
8
9 533 study articulated some positive factors that were a result of the COVID-19 pandemic, for
10
11 534 example being able to attend meetings from home and not travelling into work when not
12
13 535 working clinically. Participants therefore were able to reflect on the pandemic to date in a
14
15 536 balanced manner, which is especially powerful because these interviews were conducted
16
17 537 during the pandemic.
18
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23
24 539 It is widely evident that working in PCC brings its own challenges that are perhaps not
25
26 540 evident in other areas of healthcare. Participants in this study were able to consider what
27
28 541 gives them satisfaction as a PCC consultant, for some that included teaching their peers and
29
30 542 for others that was supporting the patients and their families. It is pertinent to note that all
31
32 543 participants were able to answer this question without hesitation, suggesting that despite the
33
34 544 stressful environment, these individuals' enthusiasm and the satisfaction gained from the job
35
36 545 is what enables them to continue to work in PCC.
37
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39

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40
41
42 547 The importance of having a good support network outside of work was deemed to be integral
43
44 548 to ensuring optimal wellbeing is maintained. For some this included gardening, for others it
45
46 549 meant spending time with their families and for others this was provided by their own
47
48 550 personal faith belief system. It is widely evidenced that having good support networks and
49
50 551 recreational activities outside of work can ensure good wellbeing is maintained^{36 37}. Recent
51
52 552 research surrounding social prescribing has identified benefits of 'prescribing' social
53
54 553 activities and local groups in the alleviation of symptoms associated with depression^{38 39}.
55
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RUNNING HEADER: WELLBEING EXPERIENCES OF PCC CONSULTANTS

1
2
3 555 Working in PCC requires one to work as part of a team⁴⁰. For the participants in this study,
4
5 556 they were able to clearly articulate the importance of the wider team in PCC⁴¹⁻⁴³. Consultants
6
7 557 were able to identify that the nursing team is crucial and the impact that having a nursing
8
9 558 workforce that is 'unstable' and changeable can have on their own wellbeing. However,
10
11 559 individuals also identified that the support for the team can also have an impact on their
12
13 560 wellbeing as it can result in feelings of not wanting to cause more work for colleagues. This
14
15 561 then results in individuals taking on extra shifts or not taking a break from work when
16
17 562 perhaps they need the opportunity to be away from work. This sense of duty and care for one
18
19 563 another is highly evidenced in occupations^{44 45}, particularly when the teams are cohesive and
20
21 564 this data indicates there is a clear sense of comradery within the consultant staff group in each
22
23 565 unit.
24
25
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27
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30

31 567 Interestingly, participants were able to vocalise without being prompted that the support that
32
33 568 is offered by the wider NHS Trusts and Health Boards is insufficient and not appropriate for
34
35 569 their needs. Staff stated that the services they offer are inaccessible due to shift patterns and
36
37 570 needing to be on the unit. Participants were also aware of the efforts that their respective
38
39 571 Trusts and Boards put into wellbeing but highlighted that perhaps outside of PCC, the work
40
41 572 that PCC does remains unclear meaning the services they provide are not appropriate.
42
43 573 Consultants want more and need more than sign posting to organisations. While some
44
45 574 recognise this is challenging there was a sense that support offered by Trusts and Boards was
46
47 575 insincere and not sustainable for PCC staff.
48
49
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51 576
52
53 577 One of the limitations of this study is the small sample size, and not every UK PCC unit was
54
55 578 represented. However, findings resonated with members of PCC Society and other research
56
57 579 in UK PCC units. Further work in UK and overseas PCC units is required to confirm our
58
59
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RUNNING HEADER: WELLBEING EXPERIENCES OF PCC CONSULTANTS

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3 580 findings. A key strength of this study is that the individuals who participated ranged in their
4
5 581 experience as a PCC consultant and this ensured the sample was representative across levels
6
7
8 582 of consultant expertise.
9

10 583

11
12 584 **Clinical Implications**

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14
15 585 The problem of burnout among doctors has been recognised by the UK government⁴⁶ and the
16
17 586 General Medical Council (GMC) and the issue of poor wellbeing has been prioritised in the
18
19 587 NHS Health and Wellbeing Framework⁴⁷. Despite this acknowledgement of the problem,
20
21 588 there remains very little research taking a solution-focused approach to provide evidence-
22
23 589 based interventions to support the wellbeing of staff generally, and nothing to date which
24
25
26 590 focuses on PCC consultants. Our research has indicated that current wellbeing offerings from
27
28 591 hospital management do not meet the needs of consultants. Furthermore, they are designed to
29
30 592 help support staff in crisis rather than prevent those crises from happening.
31
32

33 593

34
35 594 Individual and systemic interventions are required to develop resilient *systems* within which
36
37 595 *individuals* feel psychologically secure to express their concerns and vulnerabilities and are
38
39 596 supported to improve their wellbeing. The GMC report⁴⁷ and this study supports the
40
41 597 psychological theory of self-determination⁴⁸ as a way of understanding the basic
42
43 598 psychological elements of wellbeing, i.e. what is required for consultants to experience
44
45 599 wellbeing at work. These are: *autonomy*, *belonging* and *competence*. In line with the GMC
46
47 600 report, this study identified that consultants need to be felt heard, to be given a voice to
48
49 601 express what would improve their wellbeing (*autonomy*); teamwork and a nurturing culture
50
51 602 foster an environment in which consultants are able to flourish (*belonging*); and the workload
52
53 603 needs to be realistic and achievable in order for consultants to feel competent (*competence*).
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RUNNING HEADER: WELLBEING EXPERIENCES OF PCC CONSULTANTS

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3 605 More specifically, this study has identified an urgent need for PCC units and hospital
4
5 606 management to work alongside senior policy makers to ensure that each member of the
6
7 607 workforce is valued regardless of their age and that an individual's wellbeing is not
8
9 608 compromised, whilst also not compromising the care provided to patients. Hospital
10
11 609 management teams and PCC units need to work together to ensure that wellbeing
12
13 610 opportunities are accessible and available to all staff regardless of the shift patterns they
14
15 611 work. While consultants recognised the need to improve their wellbeing, they were unsure
16
17 612 how to achieve this. There was clear disdain for the offer of yoga; something more substantial
18
19 613 was required. Where there was a psychologist on the PCC unit, this was greatly appreciated,
20
21 614 but a desire for a drop-in service 24-7 was expressed. Perhaps the inclusion of a conversation
22
23 615 about wellbeing, where consultants are invited to discuss their experiences of burnout and
24
25 616 moral distress, would be welcomed. This could form part of doctors' appraisal process and
26
27 617 even GMC registration.

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34
35 619 In addition, there urgently now needs to be focused attention on the longer-term planning for
36
37 620 the ageing consultant workforce. In line with the GMC and BMA guidance this study
38
39 621 recommends a review of current rota and shift patterns and the piloting of new systems which
40
41 622 would enable consultants to continue to practise as they age, while accommodating their need
42
43 623 to work fewer on-call shifts, and their desire to mentor junior staff coming through. This may
44
45 624 reduce the number of consultants choosing to retire early because they can no longer cope
46
47 625 with the work schedules.

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51 626

627 **Future research**

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54
55 628 Future research needs to look toward implementing and evaluating evidence-based
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57 629 interventions designed to improve staff wellbeing. Psychological measures will be required to
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3 630 determine the impact of those interventions on staff burnout and wellbeing. Furthermore, the
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5 631 impact of improved PCC consultant wellbeing needs to be measured in terms of staff
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8 632 retention, sickness, and numbers leaving the speciality and the profession ^{29 30}.
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13 634 **Conclusion**

14
15 635 To conclude, the findings from this study clearly indicate that consultants working in PCC
16
17 636 face a number of challenges to their wellbeing. Current offerings to improve wellbeing do not
18
19 637 meet consultants' needs. There are some identifiable factors which need to be tackled, e.g.
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21 638 rotas and shift patterns, especially considering the ageing consultant workforce. Our study
22
23 639 supports the findings of the GMC report and other research which has identified the ABC of
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25 640 doctors' core needs: autonomy, belonging and competence. Evidence-based interventions to
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27 641 improve consultant wellbeing need to be developed and systematically evaluated to
28
29 642 determine how to improve consultant wellbeing and reduce the levels of burnout and
30
31 643 compassion fatigue among PCC consultants.
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37
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43
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45
46 649 kindly took part.
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50 650 **Contributor statement**

51
52 651 RM, PD, RS, and SS conceptualised the study. RS managed the project as academic
53
54 652 supervisor to SS. RM and PD provided clinical supervision. IB supported RS in project
55
56 653 management. SS collected the data. SS and IB led the data analysis with contributions from
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654 all other authors. IB led the writing of the manuscript with contributions from all other
655 authors.

656 Competing interests

657 There are no conflicts of interest.

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664 Data sharing statement

665 All data that are available is included in article.

666 Ethics agreement statement

667 This study involves human participants and was approved by the Aston University Research
668 Ethics Committee (ref: Psych 200248747).

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COREQ (COnsolidated Criteria for Reporting Qualitative research) Checklist

Developed from: Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International journal for quality in health care*, 19(6), 349-357.

A checklist of items that should be included in reports of qualitative research. You must report the page number in your manuscript where you consider each of the items listed in this checklist.

Topic	Item Number	Guide Questions/Descriptions	Comments	Page Number reported on
Domain 1: Research team and reflexivity				
<i>Personal characteristics</i>				
Interviewer/facilitators	1	Which author/s conducted the interview or focus group?	SS conducted the interviews	4
Credentials	2	What were the researchers' credentials? E.g., PhD, MSc	SS is an MSc student, RS is a health psychologist, RM is an advanced nurse practitioner, PD is a medical consultant in critical care and IB is a psychology researcher with a PhD and MSc.	4, 5,6
Occupation	3	What was their occupation at the time of the study?	SS is an MSc student, RS is a health psychologist, RM is an advanced nurse practitioner, PD is a medical consultant in critical care and IB is a psychology researcher with a PhD and MSc.	4,5, 6
Gender	4	Was the researcher male or female?	PD is male, IB, SS, RM, and RS are female	6
Experience and training	5	What experience or training did the researcher have?	SS who conducted the interviews received appropriate training in conducting qualitative interviews through RS and IB	4
<i>Relationship with participants</i>				
Relationship established	6	Was a relationship established prior to study commencement?	SS established rapport and potential participants through initial consent electronically and information process prior to individuals taking part in the interview	4

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Participant knowledge of the interviewer	7	What did the participants know about the researcher? E.g., personal goals, reasons for doing the study	The participants were all aware that SS was a MSc student at Aston University and this study was part of this MSc.	4
Interviewer characteristics	8	What characteristics were reported about the interviewer/facilitator?	SS had no experience in conducting research on PCC	4
Domain 2: Study design				
<i>Theoretical framework</i>				
Methodological orientations and theory	9	What methodological orientations was stated to underpin the study?	Inductive thematic analysis was used to examine the data	5
<i>Participant selection</i>				
Sampling	10	How were participants selected? E.g., purposive, convenience, consecutive, snowball	Convenience and purposive sampling	3
Method of approach	11	How were participants approached? E.g., face to face, telephone, mail	Online on social media, and through word of mouth	4
Sample size	12	How many participants?	11	7
Nonparticipation	13	How many people refused to participate or dropped out?	N/A	n/a
<i>Setting</i>				
Setting of data collection	14	Where was the data collected? E.g., home, clinic, workplace	Data was collected over video technology and the participants took part from their place of work and their homes.	4
Presence of non-participants	15	Was anyone else present besides the participants and researchers?	In all interviews only the participants were present. For those conducted in place of work there may have been people present in the room, but all participants used headphones if this occurred therefore only participants could hear the interviewer.	4
<i>Descriptive of sample</i>				
	16	What are the important characteristics of the sample?	All participants had to be currently working as consultant in a PCC unit within the U.K and had to be willing to take part in an online interview	3
<i>Data collection</i>				
Interview guide	17	Were questions, prompts, guides provided by the authors?	The topic guide was constructed by PD, RM , RS, SS based on their own clinical experiences and on the current research field.	4
Repeat interviews	18	Were repeat interviews carried out?	N/A	n/a

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Audio/visual recording	19	Did the research use audio or visual recording to collect data?	Yes, audio and visual platforms were used to collect data.	4
Field notes	20	Were field notes made during and/after the interview or focus group?		
Duration	21	What was the duration of the interviews?	Thirty minutes to 1hr 30 minutes	7
Data saturation	22	Was data saturation discussed?	Yes, and data collection finished once data saturation had been reached	4
Transcript returned	23	Were transcripts returned to participants for comments and correction?	Yes, all transcripts where participants agreed to see their transcripts, were returned to participants prior to data analysis	4
Domain 3: analysis and findings				
<i>Data analysis</i>				
Number of data coders	24	How many data coded the data?	Initially IB coded the data, RM, PD, RS, SS commented on the analysis as the different stages independently.	5
Description of the coding tree	25	Did authors provide a description of the coding tree?	The authors did not provide a conceptual description of the coding tree.	n/a
Derivation of themes	26	Were themes identified in advance or derived from the data?	Themes, as is the framework, for conducting inductive thematic analysis were derived from the data solely.	5,6
Software	27	What software if applicable was used to manage the data?	IB used NVivo to manage the data	5
Participant checking	28	Did participants provide feedback on the findings?	No.	n/a
<i>Reporting</i>				
Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? E.g., a participant number?	Yes, participant quotes were used to illustrate the themes that were found in the data. This is a crucial part of thematic analysis.	8- 16
Data and findings consistent	30	Was there consistency between the data presented and the findings?	Yes, and this was achieved by ensuring that each theme was illustrated with a relevant quotation. Throughout the study in the results section, quotations from a number of participants are present	8-16
Clarity of major themes	31	Were major themes clearly presented in the findings?	These are clearly highlighted in a table but	8-16

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			also depicted within the text.	
Clarity of minor themes	32	Is there a description of diverse cases or discussion of minor themes?	The results section and discussion focus on the eight major themes. There are no minor themes as the major themes illustrate the themes that occurred within these.	8-16

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BMJ Open

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RUNNING HEADER: WELLBEING EXPERIENCES OF PCC CONSULTANTS

A qualitative study exploring the wellbeing experiences of Paediatric Critical Care consultants working in the UK during the COVID-19 pandemic

Isabelle Butcher^a, Sumayyah Saeed^b, Rachael Morrison^c, Peter Donnelly^d and Rachel Shaw^{b*}

Affiliations

^aDepartment of Psychiatry, University of Oxford, Oxford, UK.

^bInstitute of Health & Neurodevelopment, College of Health and Life Sciences, Aston University, Birmingham, B4 7ET, UK.

^cPaediatric Intensive Care Unit, Birmingham Women's and Children's NHS Foundation Trust, Steelhouse Lane Birmingham B4 6NH, UK.

^dPaediatric Intensive Care Unit, The Royal Hospital for Children, Glasgow, G51 4TF, UK.

*Corresponding author r.l.shaw@aston.ac.uk

Abstract

Objectives: The aim of this study was to examine the wellbeing experiences of consultants working in Paediatric Critical Care (PCC) settings in the United Kingdom (UK) during the COVID-19 pandemic.

Design: Qualitative design using individual interviews and thematic analysis.

Setting: Paediatric critical care.

Participants: 11 medical consultants working in PCC in a range of PCC settings/transport teams in the UK from nine units participated. Participants ranged in years of experience as a consultant from four to 23 years.

Methods: A set of open semi-structured questions were used to elicit information about participants' experiences of workplace wellbeing. Interviews were audio recorded and transcribed.

Findings: Thematic analysis identified six themes and data saturation was reached. These were: i) *positive and negative impact of working during COVID-19*, ii) *job satisfaction and public scrutiny in the unique environment of PCC*, iii) *supporting the workforce through modified shift work*, iv) *perceptions of support and recognition offered from the hospital management*, v) *successful coping strategies are personal and adaptive*, and vi) *importance of civility and good teamwork*

Conclusion: Findings show that consultants' wellbeing is challenged in a number of ways and that the solutions to the problem of burnout are multifaceted. Action is required from individual consultants, clinical teams, hospital management, and national regulatory bodies. Our work corroborates the recent General Medical Council report highlighting doctors' core needs for wellbeing: autonomy, belonging, competence. Burnout is a long-term problem, requiring sustainable solutions. Future research needs to develop and evaluate the effectiveness of evidence-based interventions to improve consultants' wellbeing. Trials of effectiveness need to present evidence that will persuade hospital management to invest in their consultants' wellbeing within the economic context of reduced budgets and limited PCC workforce.

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2
3 43 ***Key words: intensive care units, pediatric; consultants; burnout, professional; COVID-19;***
4 ***qualitative research***
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8 46 **Strengths and Limitations**
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- 10 47 • A key strength to this research is its exploratory, interpretative design. With very little
11 previous research describing the quality of consultants' experiences of burnout and
12 48 compassion fatigue, this study offers unique insight.
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14 49
15 50 • Individual interviews were conducted with consultants, which were led by their lived
16 experience and what mattered to them, rather than being led by predetermined theory.
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19 52 • We applied Yardley's quality criteria to ensure the research was undertaken to the
20 highest possible standards.
21 53
22 54 • Consultants participated from nine paediatric critical care units and data saturation
23 was reached in the analysis. Nevertheless, it would be beneficial for future research to
24 55 be conducted in other UK units and internationally to triangulate the findings to
25 determine if they are transferable to other units.
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58 **Introduction**

59 Working in paediatric critical care¹ (PCC) is stimulating and rewarding however healthcare
60 professionals working in PCC are exposed daily to traumatic events and stressful situations.
61 This study was designed to explore consultants' experiences of wellbeing and factors at work
62 that challenge it. The workload within PCC is often consultant led and consultant delivered
63 with a significant on call requirement. It is this intensity of work, which can lead to emotional
64 and moral distress.^{1 2} It is unsurprising therefore that research globally has shown that
65 individuals working in PCC experience high rates of burnout, compassion fatigue and
66 symptoms associations with posttraumatic stress disorder (PTSD)³. Continual exposure to
67 patient and family distress can be emotionally taxing for healthcare professionals working in
68 PCC.

69
70 Prior to the COVID-19 pandemic there has been a surge of evidence highlighting that poor
71 wellbeing amongst PCC staff is a persistent problem. The literature to date has largely
72 focused on nursing staff and trainee medical professionals.^{4 5} The COVID-19 pandemic has
73 unsurprisingly had wide reaching impact on the health and wellbeing of healthcare
74 professionals due to the additional stressors and uncertainties experienced.⁶⁻¹⁰ Furthermore
75 there is a lack of research that is focused on lived experience. There is also a paucity of
76 evidence with consultants in PCC who face unique challenges; they are required to manage
77 staff and support a wider team, as well as having to make critical clinical decisions, often as
78 the most senior member of a team. To date, the research has predominantly focused on
79 measuring the pathologies of burnout, posttraumatic stress, compassion fatigue and moral
80 distress using standardised measures^{2 11}. Whilst this research is important^{12 13} it does not give

¹ The authors note that PIC and PCC are used interchangeably, for this study PCC is used to encompass high dependency units (HDU), and transport teams.

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3 81 a ‘full’ picture of healthcare professionals’ experiences at work, e.g. how their burnout makes
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5 82 them feel or how they perceive it impacts on their ability to perform. Furthermore, research to
6
7 83 date has focused on measuring the size of the problem rather than exploring lived experiences
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9 84 to determine what might help improve PCC staff wellbeing.¹⁴

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14 86 The paucity of research focusing on medical consultants working in PCC means little is
15
16
17 87 known about this important staff group. This study aimed to explore UK PCC consultants’
18
19 88 experiences of wellbeing with a view to understanding how it may be improved.

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21 89 The research questions were:

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24 90 1. What challenges to their workplace wellbeing do PCC consultants experience?
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26 91 2. What factors support PCC consultants’ wellbeing at work?

92

93 **Method**

94 **Design**

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36 95 This study adopted an exploratory, interpretative qualitative design because of its aim to elicit
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38 96 lived experiences of PCC consultants’ wellbeing. This design allows individuals to freely
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40 97 articulate their thoughts, without the researcher being prescriptive. This means data collection
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42 98 is more dynamic, with the participant leading on what matters to them, rather than the
43
44 99 researcher making assumptions.^{15 16} The consolidated criteria for reporting qualitative
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46 100 research (COREQ¹⁷) guidance was followed in the reporting of the study.

101

102 **Sample**

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54 103 This study was set within PCC units in the UK. Eligible participants were consultants in UK
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56 104 PCC units and/or Transport teams.

105

RUNNING HEADER: WELLBEING EXPERIENCES OF PCC CONSULTANTS

1
2
3 106 Convenience and purposive sampling were adopted to ensure that all consultants at each unit
4
5 107 had the opportunity to participate if they would like to as well as ensuring representation in
6
7 108 the sample from consultants with different years of experiences.
8
9

10 109

11 110 **Procedure**

12
13
14 111 The study received ethical approval from Aston University Research Ethics Committee and
15
16 112 permission was granted by the President of the Paediatric Critical Care Society to invite their
17
18 113 members to participate. The study was advertised through the PCC Society and on social
19
20 114 media during April to June 2021 and volunteers were invited to contact the research team.
21
22 115 Interviews were conducted during May to June 2021. This study formed part of one author's
23
24 116 (SS) MSc Health Psychology.
25
26
27
28
29

30 117

31 118 Once participants had contacted the researcher, they were sent a Participant Information
32
33 119 Sheet and consent form, which could be completed electronically via Qualtrics. Participants
34
35 120 were then invited to take part in an online semi-structured interview. All interviews were
36
37 121 conducted by independent researchers (SS and IB), who had no previous experience of PCC
38
39 122 and was not connected to any of the participating units, Trusts or Health Boards. The topic
40
41 123 guide was informed by existing literature as well as discussions with an advanced nurse
42
43 124 practitioner (RM), a medical consultant (PD), and a health psychologist (RS). The topic guide
44
45 125 included a set of topics and questions but allowed participants to clearly articulate their
46
47 126 thoughts and experiences. Prior to being used the topic guide was discussed with PCC
48
49 127 colleagues to ensure it flowed and topics were appropriate. SS was trained in conducting
50
51 128 qualitative interviews by IB and RS to ensure that appropriate questioning, intonation, and
52
53 129 prompts were used.
54
55
56
57

58 130

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1
2
3 131 Following completion of the interview, participants were sent a debrief form which
4
5 132 signposted them to organisations that offer support to improve healthcare professional
6
7 133 wellbeing. Recruitment ceased once data saturation had been reached. All interviews were
8
9 134 audio-recorded, transcribed, and stored on a secure online drive. Identifiable information was
10
11 135 removed to protect participants' confidentiality. Each participant was sent their transcript
12
13 136 within two weeks of taking part to enable them to omit and/or change information in the
14
15 137 transcript to ensure they were happy for it to be used. Clinical colleagues in the research team
16
17 138 did not have access to the transcripts to further protect participants' confidentiality.
18
19
20
21
22
23

24 140 A distress protocol was used to ensure appropriate safeguarding was in place should any
25
26 141 issues of concern for participants or their colleagues be raised. No such issues were raised.
27
28
29
30

31 143 Each interview lasted between 30 minutes and one hour and 30 minutes.
32
33
34

35 145 **Demographic data**

36
37 146 Self-report information on the following demographic variables was obtained: age, gender,
38
39 147 ethnicity, years of experience as a consultant in PCC.
40
41
42
43

44 149 **Thematic data analysis**

45
46 150 Data was analysed using inductive thematic analysis which offers a flexible and in-depth
47
48 151 method guided by participants' accounts rather than any predetermined assumptions.¹⁸ . A
49
50 152 six-step approach to analysing the data was used as outlined below using Braun and Clarke's
51
52 153 methodology¹⁸. SS and IB led the analysis. All authors took part in steps 4 – 6.
53
54
55

56 154 1. Data were transcribed verbatim by the researcher (SS).
57
58
59
60

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- 155 2. The transcripts were read and re read by members of the research (SS and IB) team to
156 enable familiarisation with the data. Interviews were electronically placed into NVivo
157 qualitative software to enable the data to be organised systematically.
- 158 3. Systematic line by line coding was conducted to identify common themes within the
159 data (SS and IB).
- 160 4. The themes were discussed within the whole research team to identify key common
161 themes across the interviews enabling a thematic map to be constructed. Any
162 differences in themes were discussed by all authors.
- 163 5. The themes were finalised, defined, and names generated.
- 164 6. The final themes were checked with all members of the research team.

Quality and rigour

167 To ensure that rigour was maintained throughout, the research team followed Yardley's¹⁹
168 quality criteria for qualitative research ensuring the study was *sensitive to the context* being
169 studied, the methods were *rigorous*, our reporting of the study was *transparent and coherent*,
170 and the *impact* of the work was conveyed.

172 It is acknowledged that each author's experience inevitably shapes data analysis.²⁰ The
173 researchers (SS and IB) were not previously known to any of the participants. It is important
174 to note that the lead author (IB) is a female psychology postdoctoral researcher with
175 experience in conducting research with individuals with severe mental illness. SS is a female
176 MSc student with experience in conducting qualitative interviews. RM is a female advanced
177 nurse practitioner with over twenty-five years' experience of working in the National Health
178 Service (NHS). PD is a male medical consultant in PCC with over thirteen years' experience
179 of working in the NHS. RM and PD currently work in (different) PCC units and have

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1
2
3 180 published qualitative and quantitative research over the last ten years within the critical care
4
5 181 research field. RS is a female Health Psychologist with expertise in qualitative methodology
6
7 182 and healthcare intervention development and evaluation. She has over twenty years'
8
9 183 experience of conducting applied clinical research with a range of populations in primary and
10
11 184 secondary care and in the community.
12
13
14

15 185

17 186 Patient and Public Involvement

18
19 187 Key stakeholders were involved in the conceptualisation of the study. Through the PCC
20
21 188 Society, medical and nursing staff in UK PCC units were able to provide feedback on the
22
23 189 design of the study, research questions, and methods used. Findings were presented to PCC
24
25 190 Society and feedback gathered, which has informed the writing of this manuscript.
26
27
28

29 191

31 192 Findings

32
33
34 193 Eleven PCC consultants took part, all of whom work in PCC units with consultant led
35
36 194 services and on call commitments. Individuals ranged in age from 42 to 56. Of these, five
37
38 195 were male and six were female. The years of experience as a PCC consultant ranged from 4
39
40 196 to 23. Participants were recruited from 9 UK PCC units.
41
42

43 197

44
45 198 The nine PCC units that participants worked in varied in terms of size and patient cohort.
46
47 199 They included cardiac intensive care units, general intensive care units and mixed specialties
48
49 200 units.
50

51 201

52
53
54 202 Thematic analysis generated six themes representing consultants' experiences of wellbeing
55
56 203 (see Table 1). Despite working in a highly stimulating and challenging environment all PCC
57
58
59
60

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204 consultants who took part were able to reflect on their experiences and what might improve
205 their wellbeing.

206 **Table 1: Themes identified**

Themes
1. Positive & negative impact of working during COVID-19
2. Job satisfaction & public scrutiny in the unique environment of PCC
3. Supporting the workforce through modified shift work
4. Perceptions of support and recognition offered from hospital management
5. Successful coping strategies are personal & adaptive
6. Importance of civility & staff retention for good teamwork

215 ***Theme 1: Positive and negative impact of working during COVID-19***

216 PCC consultants in this study recalled the anxiety they felt at the beginning of the pandemic,
217 which for some, interrupted their sleep and pervaded thoughts about their working practice.

218 *“at the very beginning where there was a great unknown [...] there was a lot of anxiety and a*
219 *lot of fear [...] trying to figure out how we could cope and adapt to that...[I never have]*
220 *problems getting to sleep and I was lying in bed worrying, waking up early and worrying,*
221 *erm, waking up and trying to prepare and plan”* [Participant 1009]

222 For others, it affected their close personal relationships by preventing well-established
223 childcare routines, for instance, or making it impossible to pursue “normal” activities
224 typically undertaken to boost one’s wellbeing.

225 *“there’s a few things that really did impact my wellbeing, I think. The inability to have*
226 *grandparents come and just spend some time with the kids, and to you know provide a bit of*

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1
2
3 227 *respite and childcare. [...] The inability to see friends, socially which is you know my*
4
5 228 *world...the normal stuff that I do that maintains my wellbeing- that's been a big impact. And,*
6
7 229 *you know the other thing has been my [partner] has been working from home, er for the last*
8
9 230 *sort of 18 months now nearly, which you know is not [their] choice and you know we've had*
10
11
12 231 *to adapt to that as well" [Participant 1001]*

13
14 232 One of the key changes experienced by consultants in this study between the first and second
15
16 233 waves of the pandemic was a shift from a sense of public goodwill in the first wave toward a
17
18 234 feeling of frustration in the second. This frustration was brought about, among other things,
19
20 235 by members of the public not wearing masks and not adhering to social distancing rules on
21
22 236 public transport.

23
24
25 237 *"there was a lot of good feeling and public support in the first wave and by the second wave*
26
27 238 *you know I was going on the train and people were not wearing their masks and you know*
28
29 239 *would just drive me absolutely potty. And if you asked them to put their mask on...it only ever*
30
31 240 *led to confrontation and it was just ugh this is just misery, utter misery" [Participant 1004]*

32
33 241 A key change for consultants working in PCC during the COVID-19 pandemic was having to
34
35 242 respond to the significant demand to care for critically ill adults with COVID-19. Some PCC
36
37 243 units were repurposed to accommodate adult COVID-19 patients and in other areas PCC staff
38
39 244 were redeployed to local adult Intensive Care Units (ICUs) to meet the demand. For some,
40
41 245 this was a sudden change and one which meant working with a very different patient group.

42
43 246 *"in the first wave were given [extremely short] notice to close down our PICU, move all our*
44
45 247 *patients out and then transform into an adult intensive care unit, which we did...My smallest*
46
47 248 *patient in the last month has been 600 grams. My patients, during covid, were typically*
48
49 249 *greater than 120 kilograms. So, a very different population" [Participant 1004]*

50
51 250 It is clear that PCC consultants experienced anxiety in response to the pandemic, which for
52
53 251 some, was coupled with significant changes to their practice. The pandemic was almost a

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252 double hit for participants due to the changes at work taking away those opportunities for
253 informal communication with colleagues and being unable to see friends and family outside
254 of work.

255 Nevertheless, participants were also able to clearly identify unexpected positive
256 consequences of the COVID-19 pandemic. In particular, they appreciated the flexibility with
257 remote attendance at meetings, rather than having to go to the hospital on days off.

258 *“Yeah, it made me much happier [...] instead of like dragging yourself in for pointless [...]*
259 *meetings [...] you’re like well why don’t we do this all online so you can now live your life,*
260 *attend the meetings you need to attend without attending you know” [Participant 1005]*

261 This may not sound so significant, but it was important to PCC consultants in this study.

262 Often it was necessary to schedule activities such as meetings in their non-clinical time,
263 which often included their days off. Remote attendance provided some respite and was less
264 intrusive on their life outside of work.

265

266 ***Theme 2: Job satisfaction & public scrutiny in the unique environment of***
267 ***PCC***

268 While the pandemic threw up new challenges, it was clear that PCC consultants are used to
269 working in an environment which is both stimulating and challenging; that is often where
270 their sense of job satisfaction comes from. However, some of these challenges can be
271 significant and bring about moral distress. Consultants’ experiences of moral distress often
272 were connected to the unique environment of PCC, which deals with emergent and critical
273 care of infants and children. This brings with it a degree of public scrutiny from families of
274 critically ill children, but also society more generally. Some PCC consultants in this study felt

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1
2
3 275 the weight of public expectation due to increased media coverage and scrutiny of the care
4
5 276 they provide.

6
7
8 277 *I think society has changed [...] the very, widely publicised cases that have been in the news*
9
10 278 *and things so it's sort of become doctors versus parents. And it's awful because [...] we all*
11
12 279 *want the right thing for the child. [...] I can't put myself in the parent shoes in that situation,*
13
14 280 *because no one wants their child to suffer for no reason. And I think that's, that's the biggest*
15
16 281 *challenge what we do day in day out. Um, I think you know the easy thing do is send a child*
17
18 282 *to intensive care, but it doesn't mean that it's the right thing. Because in 5 minutes I can put a*
19
20 283 *tube down I can put lots of lines in, the hard thing is the very long conversation about really*
21
22 284 *what is right [...] for that child and that family ..and [...] it's not something that happens once*
23
24 285 *in a blue moon that happens every week, sometimes three times a week, and that must be*
25
26 286 *happening across every PICU in the UK. [Participant 1003]*

27
28
29 287 Sometimes making these incredibly complex, life and death decisions, requires court
30
31 288 appearances for consultants (and others), which come with a significant sense of duty to the
32
33 289 patient.

34
35 290 *"Before I go to the court for any coroner's inquest I feel that oh my god I wish I didn't have*
36
37 291 *to do this...I go anyway regardless [...] it's not dread I don't how to describe that feeling but*
38
39 292 *it's er not a nice feeling but I just tell myself I have to do this, finally I'm doing this for the*
40
41 293 *child....I also remind myself that it's my duty to do this and be present" [Participant 1010]*

42
43
44 294 Alongside this, is the increased complexity of patients now seen in PCC.

45
46 295 *"60% of the children that come through the doors through PICU in the UK, are life limited.*
47
48 296 *And over the last year in our unit that has become 90-100%[...] so that is challenging."*
49
50 297 [Participant 1002]

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298 These extracts demonstrate the moral distress sometimes experienced by PCC consultants.

299 Not only are there difficult decisions to be made, but they feel “*hamstrung*” (Participant
300 1002) due to the demands of patient confidentiality, set against the increased media coverage
301 of individual cases sometimes instigated by families.

302 “*We can’t discuss cases...but actually once the families start releasing that information then*
303 *you can because I say it’s not us that’s done that*” [Participant 1002]

304 Nevertheless, whilst participants recognised these challenges, all individuals without
305 hesitation were able to identify what gives them satisfaction as a PCC consultant. For some
306 this was teaching other healthcare professionals, for others it was interacting with the patients
307 and their families.

308 “*Definitely spending time with families, you know supporting families through ... the hardest*
309 *times of their lives and making a difference to them. Erm... I think that’s probably the most*
310 *satisfying thing*” [Participant 1003]

311 “*The other thing I get a lot of satisfaction from personally is teaching the junior doctors. You*
312 *know they get a real buzz of learning to do the practical things or learning how to deal with a*
313 *new sick patient, and I really enjoy that aspect of it.*” [Participant 1005]

314 Participants were able to share their own experiences of moral distress and how in recent
315 years their respective units have seen a shift in the population that they are treating, due to the
316 complexity of patient cases now seen in PCC. Individuals also reflected that working in PCC
317 involves working under public scrutiny. Despite these sometimes excessively high
318 expectations from the public about what is possible in PCC, participants were able to clearly
319 express that being a PCC consultant came with high levels of job satisfaction; the unique
320 challenges faced in PCC are also what provide stimulation and fulfilment.

321

1
2
3 322 ***Theme 3: Supporting the workforce through modified shift work***
4
5

6 323 PCC consultants in this study described growing challenges related to staffing, managing
7
8 324 shift work, and the ageing workforce.

9
10
11 325 *“I think better resourcing [is needed] so that we don't feel like we are not doing a good job*
12
13 326 *because we feel like you know... sometimes there are 24 patients on the unit built for 18 and*
14
15 327 *there still are only 2 consultants and you just can't do the job you want to do”* [Participant
16
17
18 328 1008]
19

20
21 329 This volume of work is contrasted against the restricted availability of the workforce and the
22
23 330 organisation of that workforce, in terms of shift management.

24
25 331 The consultant below highlights the potential impact of consultant fatigue, which in their
26
27 332 assessment, could be prevented by different shift patterns.

28
29
30 333 *“A rota that doesn't involve a 24-hour shift where potentially I could be awake for the entire*
31
32 334 *time and you could kill someone at hour 23, and you'd feel bad about that...but the risk of*
33
34 335 *being tired and knowing that you made that mistake because you were tired ... You know we*
35
36 336 *all make mistakes all the time, [...] some mistakes can't be prevented, if you can prevent a*
37
38 337 *mistake, then you should and I think that fatigue is something that should be prevented,*
39
40
41 338 *because it's so well recognised”* [Participant 1006]
42
43

44 339 This becomes increasingly important as PCC consultants age. Some participants voiced a
45
46 340 concern that as one gets older it becomes harder to maintain the same pace at work one had
47
48 341 when newly qualified which leads them toward wanting to work in a different way.

49
50
51 342 *“I think that's something that needs to be looked at, such as succession planning and*
52
53 343 *planning for all the older and more experienced consultants and how you can use their skills*
54
55 344 *within a department and that maybe doing slightly less acute stuff and actually valuing that*
56
57 345 *contribution as much as valuing the person who is up all night”* [Participant 1007]
58
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1
2
3 346 There are clearly systemic challenges faced by PCC consultants in this study relating to the
4
5 347 available workforce and the changes in demographics of that workforce. These are issues
6
7 348 requiring hospital management input. The next theme identifies other issues the PCC
8
9 349 consultants in this study wished to raise about support provided by their respective
10
11 350 management teams.
12
13
14

15 351

17
18 352 ***Theme 4: Perceptions of support and recognition offered from hospital***
19
20
21 353 ***management***
22

23
24 354 All consultants in this study perceived that wellbeing support provided by their hospital
25
26 355 management teams was inadequate. Participants reflected on the creative wellbeing
27
28 356 opportunities offered to staff such as the provision of yoga sessions, which were not always
29
30 357 accessible to PCC consultants due to their location and timing.
31
32

33
34 358 *“Of course, HR provide yoga on a [week day] [...] it’s not practical for most of us who have*
35
36 359 *you know a clinician job, okay, so, I can’t just disappear from the ICU to go and do*
37
38 360 *downface dog for an hour. That’s not reasonable...” [Participant 1003]*
39
40

41 361 Given the challenges to their wellbeing endured during the height of the COVID-19
42
43 362 pandemic described above, it was clear that PCC consultants in this study were not satisfied
44
45 363 that the wellbeing support provided was fit for purpose.
46
47

48
49 364 *“Putting on a yoga class is probably not what people need, what they need is you know*
50
51 365 *we’ve just lost a lot of patients it’s been really sad and what should be done is management*
52
53 366 *to come in and say that must have been really tough what could we do to help?” [Participant*
54
55 367 *1003]*
56
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1
2
3 368 Yoga and similar activities were not accessible to PCC consultants. Furthermore, they were
4
5 369 perceived as a quick fix which did not provide the recognition of their effort consultants felt
6
7
8 370 was due to them following the challenges of their working experiences during the pandemic.
9
10 371 This was experienced as a lack of understanding by hospital management about what was
11
12 372 required to improve and sustain the wellbeing of individuals working in PCC. While there
13
14 373 was appreciation for the investment in psychological support for PCC staff, some consultants
15
16 374 felt this was not what they needed.

17
18
19
20 375 *“The organisation will ... signpost you to the eyeballs to [laughs] you know, I don’t know,*
21
22 376 *occupational health, psychological blah, blah... and you know what I’m not interested”*

23
24 377 [Participant 1014]

25
26
27 378 The following extract provides a good summary of the issues highlighted in this theme.

28
29
30 379 *“The [hospital management] look for all the kind of shiny gimmicky ways to just show that*
31
32 380 *they care, without actually addressing the problem [...] the latest one is all about access to*
33
34 381 *psychology and things, erm actually a lot of the problems people are facing, are related to*
35
36 382 *workload and are related to work pressure and system pressure and things like that... Erm,*
37
38 383 *so but at least then as an organisation, you can say that you care, and you try... so it does*
39
40 384 *feel a little bit like lip service sometimes, to be honest”* [Participant 1006]

41
42
43
44
45 385 It seems that what is required by PCC consultants from hospital management is recognition
46
47 386 for their services during the pandemic, recognition of the systemic challenges due to
48
49 387 workforce limitations, and sustainable wellbeing support that is appropriate and accessible to
50
51 388 those working on clinical shifts.

52
53
54
55 389

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58 390 ***Theme 5: Successful coping strategies are personal & adaptive***
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1
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3 391 As indicated in the previous theme, PCC consultants in this study wanted approaches to
4
5 392 improve their wellbeing that were appropriate and accessible to them. Many were able to
6
7 393 describe their own informal strategies to ensure that they maintain good wellbeing. These
8
9 394 included the use of humour, exercise, having an out of work routine and talking with family.
10
11 395 PCC consultants described how the sense of humour they use is unique to their place of work,
12
13 396 and sometimes is what helps in stressful work situations.

14
15
16
17 397 *I don't get angry at work, and I don't get depressed or cry at work...I tend to just cruise on*
18
19 398 *there and get the best done and um make some inappropriate jokes and comments...and*
20
21 399 *that's about it really" [Participant 1001]*

22
23
24
25 400 Hobbies outside of work were described as beneficial by some individuals.

26
27
28 401 *"I mean outside of the unit it is basically having a full set of things that make me happy...so*
29
30 402 *um spending time with my kids makes me happy.... I've started to learn the cello with my*
31
32 403 *daughter...I also have an allotment and I'll be honest I mainly kill things but it's still quite*
33
34 404 *fun and haha I have grown asparagus this year..." [Participant 1009]*

35
36
37
38 405 Others were a little more philosophical about it and suggested that the most successful
39
40 406 adaptive strategy for them was the realisation that *"I can't control everything"* [Participant
41
42 407 1010].

43
44
45 408 *"I am a Christian, I have faith which helps me incredibly because I think there's a purpose er*
46
47 409 *so a child dying for me is not a failure...you know 2 children with the exact same condition*
48
49 410 *that I treated exactly the same and one recovers and the other one dies, it's not my success,*
50
51 411 *it's not my failure. I've played my part to the best of my ability. Yeah, and it's not in my*
52
53 412 *hands so those things, bother me but don't burden me" [Participant 1013]*

54
55
56
57
58 413 This range of accounts highlights the importance of finding one's own personal strategies for
59
60 414 maintaining wellbeing, both while at work and outside of work.

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1
2
3 415 Indeed, it was clear from participants' accounts that PCC consultants in this study found that
4
5 416 when they experienced stressors both in and outside of work, their wellbeing was further
6
7 417 challenged.

8
9
10 418 *"It's like when you're a boxer and you're in the boxing ring and the guy's punching your*
11
12 419 *face and that's work, and you get to the end of the round, and you go home. And when you*
13
14 420 *get to your corner, your trainer turns around and starts punching you in the face as well then*
15
16 421 *it's life isn't very fair at those points...And you can see it all starts to fall apart a little bit and*
17
18 422 *you know...."* [Participant 1001]

19
20
21
22
23 423 This theme has demonstrated the importance of adaptive strategies for managing wellbeing
24
25 424 and that they need to be personalised to the individual. Furthermore, it has highlighted that
26
27 425 when there are combined stressors from work and outside of work, wellbeing can be
28
29 426 significantly compromised. Some PCC consultants need support in establishing barriers
30
31 427 between work and home life. Moreover, there needs to be a mechanism to communicate those
32
33 428 life events outside of work which can affect one's ability to function at work. This requires
34
35 429 good working relationships.

36
37
38
39
40 430

41
42
43 431 ***Theme 6: Importance of civility & staff retention for good teamwork***

44
45
46 432 As above, PCC consultants recognised the importance of civility within the PCC team.
47
48 433 Creating close relationships with colleagues facilitates better communication and honesty
49
50 434 which can help in situations like those above, when there are multiples stressors.

51
52
53 435 *"It is like a team bonding looking after each other and having a chat with other people,*
54
55 436 *where you find out what's going on in their lives, and whether there are other stresses"*
56
57 437 [Participant 1009]

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1
2
3 438 Furthermore, working in PCC was described as dependent on teamwork, where professionals
4
5 439 from different backgrounds come together to achieve one goal.

6
7
8 440 *“ICU is not about individuals without the team and our nursing team are phenomenal, erm,*
9
10 441 *so we need them on the work we do.”* [Participant 1005]

11
12
13 442 The significance of the team was highlighted further by some due to the *“huge exodus”*
14
15 443 [Participant 1005] of nursing staff they are currently experiencing.

16
17
18 444 *“We’ve got a huge sort of exodus of nursing staff at the moment...and that means that there’s*
19
20 445 *uncertainty in turnover in the nursing staff now, we have no control over that....suddenly*
21
22 446 *there’s more work for everybody else to do as we try [...] to get to know somebody new, [it’s]*
23
24 447 *like moving through treacle”* [Participant 1003]

25
26
27
28 448 This poor staff retention has repercussions across the unit with PCC consultants taking on
29
30 449 extra shifts or avoiding taking leave because they do not want to let their colleagues down.

31
32
33 450 This remains the case despite consultants knowing they need time away from work.

34
35
36 451 *“I have considered taking time out from work but felt that I couldn’t do that because of the*
37
38 452 *impact on my colleagues.... we’ve all been through the same experience. So er, so that’s*
39
40 453 *where we are.”* [Participant 1003]

41
42
43
44 454 PCC consultants in this study recognised the important and positive impact of civility and
45
46 455 good teamwork. Working closely together and supporting each other was one of the strategies
47
48 456 used to manage the challenges faced by poor staff retention. Burnout was raised in this
49
50 457 discussion as something experienced due to the challenges in the workforce, but was clearly
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52 458 something that consultants were able to share with colleagues.
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RUNNING HEADER: WELLBEING EXPERIENCES OF PCC CONSULTANTS

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3 459 “*[We’re a] big group of consultants and good group of nursing team and we are very honest*
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5 460 *and open about [burnout] ...able to talk about it and hold up our hands and say we’re feeling*
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7
8 461 *a bit the same and trying to help each other*” [Participant 1008]
9

10 462 Civil relationships within PCC teams on the unit were described as central to good teamwork,
11
12
13 463 which was being challenged by poor staff retention, especially among nursing staff. This
14
15 464 theme relates to others reported. Growing the workforce requires system-level change and
16
17 465 investment. As stated by some PCC consultants in this study, this is not within their gift to
18
19 466 change, so instead they focus on maintaining those civil relationships which create a
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21 467 supportive culture on the unit.
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27
28 469 In summary, the themes presented have identified the factors which challenge consultants’
29
30 470 own wellbeing and that of others working in PCC. They have presented the positive factors
31
32 471 which can help to create a wellbeing-supportive culture in PCC. The first theme identified the
33
34 472 challenges PCC consultants experienced during the COVID-19 pandemic. The remaining
35
36 473 themes cover issues that pre-existed the pandemic and which focus on issues relating to the
37
38 474 unique environment of PCC, how the workforce is structured, stressors in and out of work,
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40 475 adaptive strategies for maintaining wellbeing and the importance of civility and good
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42 476 teamwork in maintaining good quality care. PCC consultants’ recommendations for solutions
43
44 477 focused on the need to grow and develop the structure of the workforce and how shift work is
45
46 478 organised, including the tapering of on-call shifts as staff age. They wanted recognition from
47
48 479 hospital management and instead of short-term provision of wellbeing activities, they wanted
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50 480 more sustainable psychological support, e.g. from psychologists, to be available, ideally
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52 481 without need for referral.
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483 Discussion

484 PCC consultants' accounts have shown us that their wellbeing can be challenged in a number
485 of ways and that multifaceted strategies are required to improve staff wellbeing. Not
486 surprisingly, consultants' wellbeing was challenged during the height of the COVID-19
487 pandemic, but there were positives drawn from that experience too. The key challenges to
488 consultants' wellbeing focused around systemic issues relating to shift patterns, the ageing
489 workforce, high turnover of nursing staff. These challenges to wellbeing sometimes
490 manifested as compassion fatigue and/or burnout but consultants felt able to be honest about
491 this and share their experiences with colleagues. There is little evidence on the nature of
492 compassion fatigue or how we might remedy it. Indeed, a recent review by Sinclair and
493 colleagues recommended further examination and re-conceptualisation of the concept²¹.

494
495 The challenges to wellbeing identified in this study are consistent with existing literature, for
496 example it is widely documented that working shifts becomes increasingly harder the older
497 one gets²²⁻²⁶. Furthermore, regardless of their age, consultants did not see themselves in an
498 acute clinical role 'forever' with some considering more time spent in education or research.
499 This is not a surprise, and these findings support the recommendations outlined by the British
500 Medical Association: ²⁷ which include (but are not limited to): i) ensuring staff are able to
501 change parts of their role through job planning; ii) consultants are able to work flexibly and
502 where possible remotely; iii) consultants who are going through the menopause should be
503 adequately supported; and iv) consultants should feel supported and included in a workplace
504 where mental and physical wellbeing are prioritised. These findings also support those from
505 previous surveys conducted by the Royal College of Physicians that illustrated that shift
506 patterns were a factor in consultants' decisions to retire early ^{28 29}. Evidence indicates that at
507 the age of fifty-five, nights become more challenging with greater recovery time needed post

RUNNING HEADER: WELLBEING EXPERIENCES OF PCC CONSULTANTS

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2
3 508 nights. This finding suggests that greater consideration needs to be paid to the impact that
4
5 509 shift work and being 'on call' can have on staff wellbeing. Hospital management needs to
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7
8 510 consider alternative options for consultants as they age, to ensure their expertise is valued but
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10 511 their wellbeing is not compromised.

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14 513 Working in COVID-19 has and continues to have a huge impact on healthcare professionals'
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16 514 wellbeing³⁰⁻³⁴. Notwithstanding the uncertainty and anxiety during the pandemic, participants
17
18 515 in this study identified some positive factors such as being able to work (non-clinically)
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20 516 remotely. Participants reflected on the pandemic in a balanced manner, which is especially
21
22 517 powerful because these interviews were conducted during the pandemic.

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26 519 It is widely evident that working in PCC brings unique challenges but participants in this
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28 520 study were able to identify quickly without hesitation what gives them satisfaction as a PCC
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30 521 consultant, suggesting that despite the stressful environment, these individuals' enthusiasm
31
32 522 and the satisfaction gained from the job is what enables them to continue to work in PCC.

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36 524 The importance of having a good support network outside of work was deemed to be integral
37
38 525 to ensuring optimal wellbeing is maintained. For some this included gardening, for others it
39
40 526 meant spending time with their families and for others this was provided by their own
41
42 527 personal faith belief system. It is widely evidenced that having good support networks and
43
44 528 recreational activities outside of work can ensure good wellbeing is maintained^{35 36}. Recent
45
46 529 research surrounding social prescribing has identified benefits of 'prescribing' social
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48 530 activities and local groups in the alleviation of symptoms associated with depression^{37 38}.

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RUNNING HEADER: WELLBEING EXPERIENCES OF PCC CONSULTANTS

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3 532 Working in PCC requires one to work as part of a team³⁹ And recognition of the wider
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5 533 team⁴⁰⁻⁴² was especially important for consultants in this study. The nursing team was
6
7 534 considered crucial and the impact that having a nursing workforce that is ‘unstable’ and
8
9 535 changeable has on their own wellbeing was emphasised. However, individuals also expressed
10
11 536 feelings of not wanting to cause more work for colleagues which resulted in them taking on
12
13 537 extra shifts or not taking a break from work when it was needed. This sense of duty and care
14
15 538 for one another is highly evidenced in occupations^{43 44}, particularly when the teams are
16
17 539 cohesive and this data indicates there is a clear sense of comradery within the consultant staff
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19 540 group in each unit.
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26 542 Interestingly, participants reported unprompted that the support offered by their hospital
27
28 543 management was insufficient and not appropriate for their needs. Staff stated that wellbeing
29
30 544 offers were inaccessible due to clinical shift patterns. Consultants want more and need more
31
32 545 than sign posting to internal or external services. While some recognise this is challenging
33
34 546 there was a sense that support offered by Trusts and Boards was insincere and not sustainable
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36 547 for PCC staff.
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42 549 . This was a relatively small and in-depth study which focused on UK PCC units. A key
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44 550 strength of this study is that the individuals who participated ranged in their experience as a
45
46 551 PCC consultant which gave representation across levels of consultant expertise. Further work
47
48 552 in overseas PCC units is required to triangulate our findings and determine whether they are
49
50 553 transferable to other settings. Yardley’s²⁰ quality criteria helped ensure the study design was
51
52 554 appropriate to answer the research questions and it guided reflection following completion of
53
54 555 the study. On reflection, authors were content that all criteria were met.
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557 Clinical Implications

558 The problem of burnout among doctors has been recognised by the UK government⁴⁵ and the
559 General Medical Council (GMC) and the issue of poor wellbeing has been prioritised in the
560 NHS Health and Wellbeing Framework⁴⁶. Despite this acknowledgement of the problem,
561 there remains very little action at a national or organisational level to provide evidence-based
562 interventions to support the wellbeing of staff generally, and nothing to date which focuses
563 on PCC consultants. Our research has indicated that current wellbeing offerings from hospital
564 management do not meet the needs of consultants. Furthermore, they are designed to help
565 support staff in crisis rather than prevent those crises from happening.

566
567 Individual and systemic interventions are required to develop resilient *systems* within which
568 *individuals* feel psychologically secure to express their concerns and vulnerabilities and are
569 supported to improve their wellbeing. The GMC report⁴⁶ and this study supports the
570 psychological theory of self-determination⁴⁷ as a way of understanding the basic
571 psychological elements of wellbeing, i.e. what is required for consultants to experience
572 wellbeing at work. These are: *autonomy*, *belonging* and *competence*. In line with the GMC
573 report, this study identified that consultants need to be felt heard, to be given a voice to
574 express what would improve their wellbeing (*autonomy*); teamwork and a nurturing culture
575 foster an environment in which consultants are able to flourish (*belonging*); and the workload
576 needs to be realistic and achievable in order for consultants to feel competent (*competence*).

577

578 More specifically, this study has identified an urgent need for PCC units and hospital
579 management to work alongside senior policy makers to ensure that each member of the
580 workforce is valued regardless of their age and that an individual's wellbeing is not
581 compromised, whilst also not compromising the care provided to patients. Hospital

RUNNING HEADER: WELLBEING EXPERIENCES OF PCC CONSULTANTS

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2
3 582 management teams and PCC units need to work together to ensure that wellbeing
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5 583 opportunities are accessible and available to all staff regardless of the shift patterns they
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7 584 work. While consultants recognised the need to improve their wellbeing, they were unsure
8
9 585 how to achieve this. There was clear disdain for the offer of yoga; something more substantial
10
11 586 was required. Where there was a psychologist on the PCC unit, this was greatly appreciated,
12
13 587 but a desire for a drop-in service 24-7 was expressed. Perhaps the inclusion of a conversation
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15 588 about wellbeing, where consultants are invited to discuss their experiences of burnout and
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17 589 moral distress, would be welcomed. This could form part of doctors' appraisal process and
18
19 590 even GMC registration.
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25
26 592 In addition, there urgently now needs to be focused attention on the longer-term planning for
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28 593 the ageing consultant workforce. In line with the GMC and BMA guidance this study
29
30 594 recommends a review of current rota and shift patterns and the piloting of new systems which
31
32 595 would enable consultants to continue to practise as they age, while accommodating their need
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34 596 to work fewer on-call shifts, and their desire to mentor junior staff coming through. This may
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36 597 reduce the number of consultants choosing to retire early because they can no longer cope
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38 598 with the work schedules.
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43
44 600 **Future research**

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46 601 Future research needs to look toward implementing and evaluating evidence-based
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48 602 interventions designed to improve staff wellbeing. Psychological measures will be required to
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50 603 determine the impact of those interventions on staff burnout and wellbeing. Furthermore, the
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52 604 impact of improved PCC consultant wellbeing needs to be measured in terms of staff
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54 605 retention, sickness, and numbers leaving the speciality and the profession^{28 29}.
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RUNNING HEADER: WELLBEING EXPERIENCES OF PCC CONSULTANTS

607 Conclusion

608 To conclude, the findings from this study clearly indicate that consultants working in PCC
609 face a number of challenges to their wellbeing. Current offerings to improve wellbeing do not
610 meet consultants' needs. There are some identifiable factors which need to be tackled, e.g.
611 rotas and shift patterns, especially considering the ageing consultant workforce. Our study
612 supports the findings of the GMC report and other research which has identified the ABC of
613 doctors' core needs: autonomy, belonging and competence. Evidence-based interventions to
614 improve consultant wellbeing need to be developed and systematically evaluated to
615 determine how to improve consultant wellbeing and reduce the levels of burnout and
616 compassion fatigue among PCC consultants.

617

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623 Contributor statement

624 RM, PD, RS, and SS conceptualised the study. RS managed the project as academic
625 supervisor to SS. RM and PD provided clinical supervision. IB supported RS in project
626 management. SS collected the data. SS and IB led the data analysis with contributions from
627 all other authors. IB led the writing of the manuscript with contributions from all other
628 authors.

629 Competing interests

630 There are no conflicts of interest.

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637 Data sharing statement

638 All data that are available is included in article.

639 Ethics agreement statement

640 This study involves human participants and was approved by the Aston University Research
641 Ethics Committee (ref: Psych 200248747).

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COREQ (COnsolidated Criteria for Reporting Qualitative research) Checklist

Developed from: Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International journal for quality in health care*, 19(6), 349-357.

A checklist of items that should be included in reports of qualitative research. You must report the page number in your manuscript where you consider each of the items listed in this checklist.

Topic	Item Number	Guide Questions/Descriptions	Comments	Page Number reported on
Domain 1: Research team and reflexivity				
<i>Personal characteristics</i>				
Interviewer/facilitators	1	Which author/s conducted the interview or focus group?	SS conducted the interviews	4
Credentials	2	What were the researchers' credentials? E.g., PhD, MSc	SS is an MSc student, RS is a health psychologist, RM is an advanced nurse practitioner, PD is a medical consultant in critical care and IB is a psychology researcher with a PhD and MSc.	4, 5,6
Occupation	3	What was their occupation at the time of the study?	SS is an MSc student, RS is a health psychologist, RM is an advanced nurse practitioner, PD is a medical consultant in critical care and IB is a psychology researcher with a PhD and MSc.	4,5, 6
Gender	4	Was the researcher male or female?	PD is male, IB, SS, RM, and RS are female	6
Experience and training	5	What experience or training did the researcher have?	SS who conducted the interviews received appropriate training in conducting qualitative interviews through RS and IB	4
<i>Relationship with participants</i>				
Relationship established	6	Was a relationship established prior to study commencement?	SS established rapport and potential participants through initial consent electronically and information process prior to individuals taking part in the interview	4

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Participant knowledge of the interviewer	7	What did the participants know about the researcher? E.g., personal goals, reasons for doing the study	The participants were all aware that SS was a MSc student at Aston University and this study was part of this MSc.	4
Interviewer characteristics	8	What characteristics were reported about the interviewer/facilitator?	SS had no experience in conducting research on PCC	4
Domain 2: Study design				
<i>Theoretical framework</i>				
Methodological orientations and theory	9	What methodological orientations was stated to underpin the study?	Inductive thematic analysis was used to examine the data	5
Participant selection				
Sampling	10	How were participants selected? E.g., purposive, convenience, consecutive, snowball	Convenience and purposive sampling	3
Method of approach	11	How were participants approached? E.g., face to face, telephone, mail	Online on social media, and through word of mouth	4
Sample size	12	How many participants?	11	7
Nonparticipation	13	How many people refused to participate or dropped out?	N/A	n/a
<i>Setting</i>				
Setting of data collection	14	Where was the data collected? E.g., home, clinic, workplace	Data was collected over video technology and the participants took part from their place of work and their homes.	4
Presence of non-participants	15	Was anyone else present besides the participants and researchers?	In all interviews only the participants were present. For those conducted in place of work there may have been people present in the room, but all participants used headphones if this occurred therefore only participants could hear the interviewer.	4
<i>Descriptive of sample</i>	16	What are the important characteristics of the sample?	All participants had to be currently working as consultant in a PCC unit within the U.K and had to be willing to take part in an online interview	3
<i>Data collection</i>				
Interview guide	17	Were questions, prompts, guides provided by the authors?	The topic guide was constructed by PD, RM , RS, SS based on their own clinical experiences and on the current research field.	4
Repeat interviews	18	Were repeat interviews carried out?	N/A	n/a

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Audio/visual recording	19	Did the research use audio or visual recording to collect data?	Yes, audio and visual platforms were used to collect data.	4
Field notes	20	Were field notes made during and/after the interview or focus group?		
Duration	21	What was the duration of the interviews?	Thirty minutes to 1hr 30 minutes	7
Data saturation	22	Was data saturation discussed?	Yes, and data collection finished once data saturation had been reached	4
Transcript returned	23	Were transcripts returned to participants for comments and correction?	Yes, all transcripts where participants agreed to see their transcripts, were returned to participants prior to data analysis	4
Domain 3: analysis and findings				
<i>Data analysis</i>				
Number of data coders	24	How many data coded the data?	Initially IB coded the data, RM, PD, RS, SS commented on the analysis as the different stages independently.	5
Description of the coding tree	25	Did authors provide a description of the coding tree?	The authors did not provide a conceptual description of the coding tree.	n/a
Derivation of themes	26	Were themes identified in advance or derived from the data?	Themes, as is the framework, for conducting inductive thematic analysis were derived from the data solely.	5,6
Software	27	What software if applicable was used to manage the data?	IB used NVivo to manage the data	5
Participant checking	28	Did participants provide feedback on the findings?	No.	n/a
<i>Reporting</i>				
Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? E.g., a participant number?	Yes, participant quotes were used to illustrate the themes that were found in the data. This is a crucial part of thematic analysis.	8- 16
Data and findings consistent	30	Was there consistency between the data presented and the findings?	Yes, and this was achieved by ensuring that each theme was illustrated with a relevant quotation. Throughout the study in the results section, quotations from a number of participants are present	8-16
Clarity of major themes	31	Were major themes clearly presented in the findings?	These are clearly highlighted in a table but	8-16

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			also depicted within the text.	
Clarity of minor themes	32	Is there a description of diverse cases or discussion of minor themes?	The results section and discussion focus on the eight major themes. There are no minor themes as the major themes illustrate the themes that occurred within these.	8-16

For peer review only