Article details: 2023-0011
Title: The impact of patient death on psychology, preparedness, and coping in medical training: a qualitative study
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Reviewer 1: Eric Kai Chung Wong
Institution: Department of Medicine, Geriatric Medicine, University of Toronto
General comments (author response in bold)

Page 3 line 129 says that purposive sampling was used to recruit from a diverse group of genders. However, sex and gender were not reported in the results section. Were potential participants asked to disclose their gender identity in the recruitment process
Participants were not asked to disclose their gender identity in the recruitment process and we have edited the methods section as appropriate: "Purposive sampling was used to ensure a diverse group of residents from all training levels, and programs." (lines 183–185)

Page 3, line 136: "… in depth understanding of resident experiences with patient death." Looking at the interview guide, I think the goal of the study was to understand resident experiences with their FIRST patient death. The introduction (page 3 line 109) stated the objective is to understand EARLY experiences with patient death. However, later in the results, the authors report on resident experiences with patient death in general. The manuscript title also does not reflect the focus on the first patient death experience.
Although we asked participants about their first death experiences during interviews, many participants discussed multiple death experiences that were memorable. Particularly early death experiences. We feel the title of the study better captures our results.

Did the investigator conducting the interviews have experience with qualitative interviews? If not, were they trained prior to the interviews?
"All data was reviewed by DBV (MHPE trained senior author with over 5 years of experience in qualitative methods) and IR (interviewer) and codes were expanded and merged (level 2 coding)." (lines 196–198)
"DBV is a male General Internist and clinician educator at McMaster University. He has experience in qualitative methods including a Master's in Health Professions Education from the University of Illinois Chicago." (lines 202–205)
"All members of the research team received training from DBV prior to interviews and data analysis." (line 229)

Please clarify whether all transcripts were independently analyzed by three investigators (i.e. transcripts were reviewed in triplicate). Or were the transcripts divided among the three investigators?
All transcripts were analyzed in duplicate by WY and CG, with data confirmation by DBV and IR. Due to the personal experiences of all authors with patient death, as well as the sensitive nature of the topic discussed, we felt individually analyzing each transcript prior to discussing them as a group would enrich the data.

Was the analysis guided by a researcher with expertise in qualitative research? If so, mention as part of the methodology and study strengths. Otherwise, can consider stating as a limitation.
"All data was reviewed by DBV (MHPE trained senior author with over 5 years of experience in qualitative methods) and IR (interviewer) and codes were expanded and merged (level 2 coding)." (lines 202–205)
"DBV is a male General Internist and clinician educator at McMaster University. He has experience in qualitative methods including a Master's in Health Professions Education from the University of Illinois Chicago." (line 229)

Results section: The three themes stated in the abstract are not well outlined in the results section. Related to this, there's no table of themes and subthemes. The table may not be necessary, but the results section should be structured based on the major themes.
We have added subheadings in the results sections and summarized quotations in Tables 2–4.

Page 8 line 308: "Despite empathy playing a central role in physician identity, participants in our study describe a reduction in empathy towards patients with repeated death experiences." – Consider revising. "… a reduction in empathy after repeated patient death experiences"
We have revised this in the Interpretations sections "Despite empathy playing a central role in physician identity, participants in our study describe a reduction in empathy after repeated patient death experiences." (lines 339–340)

Was there any difference in the reported experiences of senior trainees vs junior ones?
Thank you for this comment. We did not specially notice any differences between senior and junior trainees as this was not a focus of our interviews. Evidence from literature shows that trainees and senior physicians have similar psychological impact but with differing intensity of emotional responses. The evolution of physician experiences with patient death would be an interesting follow up to our study.

Discussion: Some published studies (including some cited in the manuscript) suggests that graduated physicians (not in training) experience similar psychological impact from patient deaths. Who should teach these coping skills to trainees if senior physicians also have similar experiences? Would supervising physicians also benefit from cognitive behavioural therapy?
Thank you for this comment. We are currently unaware of any literature that states CBT will benefit physician burnout specifically. This would be an interesting avenue for future studies.

Consider mentioning what this study adds to the existing literature. Are there other studies looking at trainees' first experience with death or do most studies look at patient deaths in general?
There are other studies that look at patient death experiences – but we are the first to describe the psychological impact of early death experiences on trainees, highlighting normalization of these experiences and specific scenarios that have high emotional impact.

Reviewer 2: Martina Kelly

Institution: Department of Family Medicine, University of Calgary
General comments (author response in bold)

The title could be more specific e.g. to indicate residents, or first experiences; the term psychology is unclear.
Title has been revised to: "The impacts of early patient death experiences on multidisciplinary residents rotating on Internal Medicine Clinical Teaching Units: A Qualitative Study" (lines 1–2)

Introduction: this felt somewhat brief. I wondered if this is a topic that is typically or rarely addressed in medical education, especially since the references for previous work are quite dated – 1991, 2005. Perhaps naively I had hoped that medical education may have progressed since then. I am unsure if any national data exists on how this topic is covered in UG or PG training generally, or even more specifically in what I can imagine would be 'risky' disciplines such as ICU.
The introduction is brief partially due to word limits of the journal but also because there are limited studies on trainee experiences specifically.

How many residents were eligible to participate and how were residents chosen 'purposively' – I'm just trying to understand how representative the sample was of all the residents.
All current residents that completed an internal medicine rotation where asked to participate. Given that many residents are required to complete several rotations in internal medicine across the 3 sites in McMaster, it would be hard to estimate how many residents total would have been eligible for the study. We purposively recruited based on training levels and program ensuring that not only internal medicine trainees were captured in the study.

I'm thinking no data on school of training was collected but did wonder if that may have had any impact, if any participants had any educational supports/training prior to residency.
Thank you for this comment. Unfortunately we did not collect data on school of training.

I also wondered about the timing of the death experience e.g. how long prior etc, given variances in training program lengths and issues of recall.
Thank you for this comment. We did not identify any themes based on duration of training as there could be multiple factors that impact the training length including personal and career factors. We specifically asked participants about their first patient death experience but many participants discussed other memorable experiences.

The text describes some independent coding but it's unclear if or how themes were identified. I appreciated the detail on ethics and team background.
We have updated the Results section to provide further details on coding: "WY and CG, both internal medicine residents at time of data collection, analyzed the data independently, iteratively, and concurrently with data collection in a constant comparison method. Interview transcriptions were analyzed one by one using thematic analysis to understand which patient death experiences were considered memorable, how trainees were impacted by the situation, how they navigated emotional responses, and coping mechanisms used (level 1 coding). A code book

was created using NVivo (QSR International). All data was reviewed by DBV (MHPE trained senior author with over 5 years of experience in qualitative methods) and IR (interviewer) and codes were expanded and merged (level 2 coding).” (lines 191–198)

The data comments on how that experience influenced subsequent experiences of death – I may have liked a bit more detail on that in terms of how the experience of death over time is managed.
Our data comments on subsequent clinical experiences but not specifically with patient death.

I wondered if some signpost sentences or subheadings may help organise the data to support the narrative presented.
We have added subheadings in the results sections and summarized quotations in Tables 2 – 4.

I wasn’t sure how the focus of the discussion on empathy decline added to my understanding of the topic, as this feels like a well acknowledged problem in medical education.
This is a well acknowledged problem in medical education. In our manuscript, we specifically highlight how patient death experiences contribute to reduction of empathy as a coping mechanism, and how this contrasts with our identity as physicians, which expects us to have and display empathy as a core element of the physician-patient interaction.

The focus of much of the results is on individual coping and the authors make some suggestions on how to address this, such as CBT – although I’m not sure about the pragmatics of this.
Thank you for your comment. We agree this is a difficult topic to address and further research and work is needed for solutions that are pragmatic and effective.

They suggest further research is needed to determine how to support how to cope with unexpected deaths, but I wondered if they could make some suggestions, even based on their own experience about what could be done? For example – raising the topic during undergraduate training, sharing their findings about the factors which may increase risk of negative experiences? Drawing on support resources that exist? The role of preceptors /teams e.g. team debriefs post-code etc
Unfortunately, this was not within the scope of this manuscript. We did touch on this in our interview and that data is in a separate manuscript currently under review in another journal.

I wondered if they had any reflections on how medical and societal culture could contribute to their findings and what structural changes could be implemented to support learners beyond deflecting that responsibility to individual learners?
Unfortunately, this was not within the scope of this manuscript. We did touch on this in our interview and that data is in a separate manuscript currently under review in another journal.

In the concluding paragraph I might attenuate the statement ‘repeated exposure leads to depersonalisation and empathy loss’ as this may be the case for the participants in this study

but perhaps some caution needs to be taken to say this is ‘always’ the case’.
We have updated the concluding paragraph “Repeated exposure may lead to depersonalization and empathy loss.” (lines 465–466)