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“It’s been years and it still hurts”: Paediatric Critical Care staff experiences of being involved in serious investigations at work: a qualitative study

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Abstract

Background Evidence conducted globally has shown that patient care improves when staff are well. Investigations, although necessary to understand errors and unanticipated events, can be distressing. Feelings of shame and guilt are associated with making mistakes and can lead to moral injury.

Objective To explore staff experiences of investigations to develop a staff care package. Design: Exploratory qualitative.

Setting(s) Paediatric Critical Care (PCC) in a UK quaternary hospital.

Participants 14 doctors and nurses.

Methods PCC staff who had experienced an investigation were interviewed individually. Transcripts were analysed using thematic analysis. Results: Fourteen interviews were conducted. Investigations involved Serious incidents, Disciplinary, and Professionalism cases. Four main themes related to: (1) Emotional impact; (2) Negotiating process; (3) Communication challenges; (4) Needing support.

Conclusions This research has identified aspects of the investigation process which can be upsetting for staff, cause unnecessary distress or moral injury. Findings informed a model for a Feelings First Care Pathway for Serious Investigations.

Keywords Practice, Psychological distress, Qualitative methods, Stress, Well-being

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Introduction and background

Patients are the primary victims of medical errors, additionally it must be acknowledged that healthcare professionals (HCPs) can experience vicarious or secondary trauma as a result of these complex situations [1]. The trauma associated with HCPs' work-related critical incidents qualify as trigger events for post-traumatic stress disorder (PTSD) [2, 3]. Experiences of PTSD, burnout and moral distress among HCPs have been associated with poor quality of care [4]. It is possible that taking part in an investigation, with the intention to improve care, could adversely affect staff wellbeing and the quality of care.

HCPs may be involved in a variety of work-related investigations including medical errors and conduct concerns. These are mainly investigated internally with some being escalated to the appropriate regulatory professional body. Brook et al. interviewed 19 UK doctors to explore experiences of being investigated by the UK General Medical Council (GMC). Doctors reported elements of the investigation were distressing impacting their mental health. GMC processes were likened to a court case and left participants with high levels guilt and anxiety that may have contributed to early death [5]. Horsfall's review of 114 doctors who died between 2005 and 2013, with a GMC case at the time of their death, found that 26 were classified as 'suicide' and 4 cases were classified as 'suspected suicide' [5]. The British Medical Association called for a review and better support for medical staff undergoing GMC investigations [6].

There is a paucity of research about the impact of work-related investigation and possible solutions. Maben et al.'s (2021) [7] work is an exception. They interviewed 15 HCPs to explore their experiences of the fitness to practise investigation process, findings suggested that staff wellbeing can be managed during and after an investigation through better psychological support, and more transparent and objective communication [7]. However, there is a gap in the evidence regarding effective methods of caring for staff in the context of investigations.

Paediatric critical care (PCC) is a specialised service which involving taking care of children aged between 0 and sixteen years of age in hospital. The care given includes; recognition and stabilisation of a sick or injured child on a general ward, to enhanced observation and monitoring in a high dependency unit (HDU). Furthermore, working in PCC also involves providing highly specialist care within a paediatric intensive care unit (PICU). Working within PCC can be a highly rewarding yet stressful job with studies conducted worldwide indicating that staff working in these settings have higher rates of burnout and

compassion fatigue than other medical specialities [8, 9]. Being involved in investigations to understand errors and unanticipated outcomes can challenge PCC staff wellbeing [10, 11]. PCC units are already highly demanding and challenging environments to work in being involved in investigations adds to these demands [12–14].

Aims and objectives

This study aims to explore qualitatively how wellbeing is challenged and supported during work-related investigations. Findings will inform development of guidelines for psychological and practical support for staff during these traumatic experiences.

Design and methods

Ethical considerations

The study was approved by the Health Research Authority (20/HRA/3817) and Aston University Research Ethics Committee (UREC280719). Permission was granted by the hospital's Research and Development department. Informed consent was provided. This included audio-recording of the interview and use of verbatim quotations.

Design

An exploratory approach used inductive thematic analysis to explore HCPs' lived experiences of investigations [15].

Setting and sample

PCC staff based within a PCC service comprising of a 31 bedded quaternary unit and outreach service, were recruited through purposive sampling. Eligible participants were all self-identified as being involved in a non-criminal investigation (excluded due to legal restrictions in sharing information), this included serious incidents, disciplinary and professionalism cases.

Procedure

The research team advertised the study via email and through it being promoted through a range of staff communication channels on the PCC unit during April– June 2022 and it was open to approximately 300 staff. Interested eligible volunteers were emailed a Participant Information Sheet and a Qualtrics link to a consent form. Individual interviews were offered online, telephone, and in-person based on participants' availability. All interviews were conducted by an independent female researcher (EY) using a piloted pre-prepared semi-structured interview schedule (see additional file 1). The researcher had received advanced qualitative methods training to postgraduate level. This researcher who conducted the interviews

was not known to the participants and did not work on the PCC unit. The questions focused on participants' experiences of investigations and what about those experiences helped and hindered their wellbeing. They were also asked how they would improve the process. Following the interviews, participants were signposted to supportive resources. Interviews varied between 40 and 95 min. They were audio-recorded, transcribed verbatim and stored securely. All identifiable data were removed during transcription. The researcher kept reflective field notes throughout data collection and analysis.

Data analysis

Researchers used Braun and Clarke's (2006) six phases of inductive thematic analysis, taking a bottom-up approach meaning that participants' accounts were prioritised in the active generation of themes [15]. It is not a linear process; the researchers worked reflectively back and forth between the phases. Two researchers (EY and RM) worked through stages of line-by-line coding and generated initial themes independently. When no new themes were arising, we considered data saturation to have been reached. All team members, which included, a Consultant Intensivist, Clinical Psychologist, Advanced Nurse Practitioner, Health Psychologist and Post-doctoral researcher then worked together to finalise a set of themes which represented participants' lived experience of work-related investigations.

Table 1 Themes and sub themes

Main themes			
Theme 1 Emotional impact: "investigation is a nurse's worst nightmare"	Theme 2 Negotiating process: "a lot of the stress and trauma comes from the unknowing"	Theme 3 Communication challenges: "you don't actually know what it is that you've done"	Theme 4 Needing Support: "really comforted by someone experienced talking about their own process"
Sub themes			
• Self-identity	• Unfamiliarity of the process	• How you are told about the investigation	• Guidance throughout the process
• Everlasting effects	• Length of process	• Communication during process	• Psychological support
• Anxiety	• How meetings conducted		• Being emotionally prepared
• Loss of voice	• Fairness and safety of people involved particularly during disciplines		• Signposting to what is available

Findings

A total of 14 PCC staff members (male $n=2$) were interviewed. Participants were aged between 28 and 58 years, with length of time in current PCC role ranging from 1.5 years to 18 years. The occupations of participants were: doctors, including consultants ($n=3$) and 1 doctor in specialist training; and nurses, including senior nurse ($n=1$), outreach nurse ($n=2$), mid-career nurses ($n=1$), advanced nurse practitioner (ANP) ($n=3$), early career nurses ($n=2$), and trainee ANP ($n=1$). Median length of time since the incident was 4 years. Staff were involved in the full spectrum of investigations including serious clinical incidents, disciplinarys and conduct investigations. Staff had personally been involved or had provided evidence in an investigation.

Thematic analysis generated four themes: (1) Emotional impact; (2) Negotiating process; (3) Communication challenges; (4) Needing support. These can be seen in Table 1 with sub themes.

Theme 1: emotional impact: "investigation is a nurse's worst nightmare"

This theme encapsulated the devastation and anxiety staff experienced and subsequent challenges to their self-identity. Investigations were reported to have had a significant long-lasting impact on staff sense of self. The sustained impact is experienced as suffering consisting of guilt, self-blame, and shame. Recovering from the investigation process and the preceding incident participants reported to be an emotionally exhausting journey, which left a scar for many staff:

"it's a lengthy time that stays with you,..., 'do you know what, actually... you should have done a better job and this child might have survived'. I'm not sure if that ever leaves you, really." (P3 nurse).

The unhealed pain and trauma of the investigations significantly impacted participants' sense of self, both at work and at home. This result in participants experiencing disappointment, self-blame, damaged confidence, perceived failure, and self-doubt. Being investigated for an incident has the power to wipe away all the effort put into a career and professional development:

"I lost confidence in... my clinical ability as a [doctor] because it was probably at a point in my career where I was very comfortable in my role, I was senior, overseeing, you know, a lot of juniors and also watching juniors do procedures and then all

of a sudden you've made this error and I just felt... incompetent is maybe a bit of an overstretch but I just doubted my competence, so some doubt, yeah." (P5 doctor).

Furthermore, staff appeared to internalise the mistake they had made; it became a part of their identity, they would even introduce themselves as "the person who made the mistake" (P6 nurse). This may act as a request for support, wanting to be seen and for the error to be discussed.

"I always say to people, I am the person who made the mistake, that's how I always introduce it, I am the person who made the mistake, doesn't matter that there's been many more mistakes post me, and there's been a few serious incidents post me, I still introduce myself as, I am the person who made the mistake." (P6 nurse).

The internalised guilt and shame stayed with some staff for years. With disciplinaries, participants highlighted that even if the investigation was resolved and settled, they felt they would always be seen as "guilty" in others' eyes; the accusations made are perceived to be irreversible:

"it also felt like very much even though they say we're going to investigate this, for me it felt like I'm already guilty, the decision is already made, you are guilty and we're trying to investigate to prove that you're not, or you are" (P14 doctor).

When a complaint has been made by a family member with emotions such as anger involved, the staff member expressed that they can feel concerned for their safety.

"there have been occasions when people have been, you know, assaulted or, you know, things like that so you do wonder a little bit about that sort of thing" (P7 doctor).

Feeling unheard, lack of opportunity to express emotions and defend oneself, contributed to the internalisation of the errors made. Many participants mentioned that this study has been the first time they ever discussed the investigation experience openly. Participants were surprised at the emotions they experienced during the interviews and even considered

seeking psychological support for their suppressed emotions associated with the investigation:

"I didn't expect this to be this difficult to talk about, but there's clearly quite a lot of [getting upset] guilt going on still." (P13 nurse).

This study was an opportunity to talk and process their experiences for the first time, demonstrating the value of a psychologically safe space to identify and express one's feelings.

It was clear participants felt that their feelings should be recognised and acknowledged before the facts of the investigation were discussed. When this did happen, they described just how powerful it was for their feelings to be anticipated:

"something's not right with you, are you okay? I felt like oh my days, someone has acknowledged I feel like crap without me saying anything" (P12 nurse).

Theme 2 negotiating process: "a lot of the stress and trauma comes from the unknowing"

Those staff who had never been involved in an investigation did not know how the process works, producing anxiety and feelings of isolation.

"if you've gone through that process then you don't have that anxiety that comes with it, because you've already gone through that process... [you] can overthink it, and feel much more vulnerable because we don't understand that process" (P6 nurse).

Lack of clarity about the investigation procedure was linked to feelings of vulnerability. Written information is required to enable staff to read about the process. As when spoken to about being involved in an investigation, emotions were high, and participants described being deaf to what was being said. The investigation process was lengthy - around a year and sometimes up to 3 years. This equates to long periods of sustained stress, with staff often not knowing where they are in the process and how much more there is to come. Clarity of process would enable participants to track progress, which could potentially relieve some of that stress associated with not knowing. Furthermore, not being aware of potential outcomes to the investigation was described as distressing:

"It's like kids with fairy tales of wickedness, you make up the most awful outcomes and a lot of the stress and trauma comes from the unknowing, from people

not dealing with the uncertainty and so if they were much clearer about that it would be much less traumatic.” (P8 doctor)

While the challenge of getting the right time for everyone was appreciated, the timing of investigation meetings was important:

“I discharged a patient, was asked to go in my downtime, eat my lunch and come out and admit a patient, it felt wrong” (P13 nurse).

The impact of investigation meetings being held on zoom was highlighted as challenging; it is an emotive process, and participants felt unsupported going through it on their own at home.

“not only to support me, to ensure that feedback was delivered appropriately, to help me say what I wanted to when emotional” (P2 nurse).

Indeed, participants involved in disciplinaries or conduct hearings felt the process was unfair and they were not looked after. The process was felt to be out of proportion to the issue:

“5 minutes of bad behaviour and you could end up with 18 months of punishment... that stress and lack of control and it just felt really disproportionate “. (P8 doctor)

Incidents of this kind are likely to happen to most staff members at some point during their career and so that support and recognition as a valued colleague needs to extend throughout any investigation procedure. Furthermore, there is a need for support, regardless of the investigation outcome:

“even if you’re not innocent you are a highly respected, paid, valued member of staff who may have made a mistake, in which case I still want to protect you so that you can continue to do your work... How can we keep you safe”? (P8 doctor)

Theme 3 communication challenges: “you don’t actually know what it is that you’ve done”

Participants acknowledged the complexities of telling staff they have been involved in an incident. Likewise, the way they were told they were being investigated impacted the way they felt about it. Being told by someone unknown to them, seeing uncensored complaint letters, the timing of the telling and a complete unpreparedness for the difficulty of the conversation

were identified as challenging to one’s wellbeing. Having the details of the incident in that first communication is vital; this happened less often in disciplinaries, creating suspicion and a felt disconnection from other members of staff.

“So my first meeting with the investigating officer was probably about six weeks after being told, it was almost two months”. (P14 doctor)

There was a consensus amongst participants that being told by someone you knew in a conversation would be ideal. The timing of this being on or off shift was recognised as important; the preference was more individualised. Participants wanted forewarning about the nature of the discussion rather than being ‘tricked’ into a meeting. For example:

“this will be a difficult conversation, you may want to bring a colleague” (P8 doctor).

Participants described long periods of silence where no updates were received. This led to feelings of isolation with participants describing having to find out information for themselves rather than updates being provided as a matter of protocol. They wanted these updates to be regular even if nothing had changed since the last one.

“I emailed multiple times, occasionally I got an email back, I only ever knew what was happening through third parties”. (P10 nurse)

People wanted to feel heard in the process:

“the waiting process for me was hard, I felt like my voice wasn’t really heard, my feelings and thoughts were on a piece of paper in a statement but that was all that they needed from me, so kind of a bit disregarded and completely left out of the loop of what was happening with the investigation as well”. (P10 nurse)

Terminology is key; some participants described how the term “critical friend” (P2 nurse) was used and the confusion surrounding this:

“I’ve never heard that terminology used, what does ‘critical friend’ mean, are they there to support me or to tell me I’ve done it wrong? The person nominated wouldn’t have been the person I would’ve chosen”. (P2 nurse)

Throughout this theme, the significance of regular and transparent communication has been identified.

Theme 4 needing support: “really comforted by someone experienced talking about their own process”

Participants described being unclear about who they could talk to about the investigation and about what needed to be confidential. When they were able to have open and honest conversations with colleagues, that helped staff understand that investigations are common and they are not alone.

“she shared with me, other doctors, consultants, they have made mistakes, she said, ‘you’ll make another mistake, we’re in that environment where it can happen’... it was a really good conversation”. (P6 nurse)

One method of support that participants suggested would improve their experience was to have an allocated person who has experienced the process themselves, “in their corner” (nurse P6), supporting them directly. Staff were clear that they would like this nominated individual to provide non-judgemental support rather than focusing on trying to rescue them or fix the problem. It was clear to them that this individual would need to be appropriately skilled to take on this role; participants expressed an interest in offering this kind of support following their own experience of being investigated:

“I’ve just been through you know like a SIRI [serious incident requiring investigation] process... she was really comforted by someone experienced talking about their own process and was actually like, thank you, you know for sharing what you’ve been through, you’re through the end now, so that gave hope you know it would all be okay” (P11 nurse).

It was clear that staff wanted space within the investigation process to identify and manage their emotions:

“I think the serious investigation is factual and it’s looking at the reasons why it happened and it’s not emotive... I didn’t get to talk about it as much as I wanted to talk about it or it kind of meant that a lot of reflection... I felt like I had to go back and do it in my own time”. (P5 doctor)

Oneway participants identified to achieve this was to create space for debriefing throughout the process. It was felt these debriefs or ‘check-in’ meetings need to be meaningful though and integrated into the standard investigations protocol:

“somebody had even come out of the meeting, to ask if I was okay, I told them no, and then nobody else followed that up, and I think that was quite poor”. (P13 doctor)

Psychological support was valued by both those participants who had accessed it and by those who had witnessed it since, as it was not available to them at the time. Some participants felt psychological support helped them to such an extent that they were able to return to work more quickly than anticipated. The impact of psychological support was viewed as two-fold: it helped people understand why they had acted in a certain way and made a particular decision; second, having that more in-depth understanding of decisions and behaviour would allow for reflective learning and better action points for the future. In addition, embedded within the support provided by a psychologist is the prioritisation of psychological safety:

“they helped me understand why I made the wrong decision, helped me understand my unwanted emotions, I remember saying I am not insane”. (P4 nurse)

Participants wanted psychological support to be integrated into the investigation process and to be automatically signposted to resources to support them, rather than having to find these for themselves. Participants felt that the message, “it’s okay to not be okay” (P10 nurse), needed to be present from the outset. Equally, there was a felt need for the possibility of vicarious trauma and post-traumatic stress to be acknowledged. Due to the potential severity of trauma experienced, participants felt that any support resources signposted needed to be fit for purpose.

“there is no quality assurance around these things that the Trust [Trust/Hospital] are recommending, they have no idea whether it works” (P4 nurse).

In summary, participants shared sensitive and sometimes traumatic experiences of work-related investigations. They identified hindering elements within these experiences, which suggest that feelings need to be recognised and addressed appropriately, the process needs to be more transparent, communication should be structured, and support should be embedded.

Discussion

As evident in participants’ accounts, taking part in an investigation was a painful journey; for most, a pain yet to heal. It is clear that HCPs can experience trauma during and following an investigation, which can be compounded by a culture of perfectionism and an

Table 2 Care pathway for serious investigations– feelings first

Investigations need to take place within a psychologically safe environment

Key staff involved: individual being investigated, line manager, guide providing peer support, psychologist, investigation panel chair

Phase of investigation	Action/recommendation
Transparent, accessible information	<ul style="list-style-type: none"> • Transparent information for all staff <ul style="list-style-type: none"> - Plain English flow diagrams of process - Video describing process including how it feels to be involved, self-care and signposting • Signposting to internal support services available to staff (e.g., internal psychological services, counselling, mentoring) • Signposting to external support provision (e.g., NHS Health Practitioner, a UK service providing mental health support for NHS staff) • Offer a psychologically informed debrief post incident.
Communication that an investigation is required	<ul style="list-style-type: none"> • Inform individual concerned that the incident has been categorised as serious and will be investigated • To be aware of how people would like to be told they are involved in an incident • To talk through likely outcomes • Culture of early debrief
Preparation for the investigation	<ul style="list-style-type: none"> • Remind individual of the process (point to information available on internal website) • Inform individual's line manager of the investigation • Identify a guide (a person who has been through an investigation themselves and volunteered to provide peer support) that is agreeable to all parties • Consider representation from the psychology service to attend investigation meetings
The Guide's role	<ul style="list-style-type: none"> • Guides will have experienced the process and have peer support skills • Negotiate frequency of update information from investigation and assist obtaining these • To assist the individual in providing a written statement about the incident if requested by the investigation panel • To actively listen to the individual's description of the incident • To provide non-judgemental support to the individual throughout the investigation, e.g., by identifying key points for discussion, questions to ask the panel • To assist individual in identifying their signs of distress and establish strategies for keeping them safe throughout the investigation • Guides will be supported by the psychology service within the hospital
Reviewing the incident in the investigation panel meeting	<ul style="list-style-type: none"> • Circulate list of panel members prior to meeting • Offer a face-to-face meeting to the individual • Consider the timing in relation to clinical workload, shifts, flexible working • Ensure the guide can attend • Factor in time for supportive debrief post-meeting
Reviewing the investigation outcome	<ul style="list-style-type: none"> • Include the individual in identifying a solution and if wanted, to be part of actioning these solutions • To check-in 1–2 weeks after the event to negotiate ongoing support
Process evaluation	<ul style="list-style-type: none"> • Debrief on investigation process from the individual and investigation panel • Survey investigation panel and individual on what went well and what could be improved.

associated unforgiving attitude toward medical errors [16]. The healthcare safety investigation branch of the UK Department of Health and Social Care echoed these findings by acknowledging how staff can experience significant emotional responses that greatly impact on their own health and their future ability to work [17]. The Patient Safety Incident Response Framework (PSIRF) developed by NHS England which is currently being implemented, highlights that staff must be supported during the investigation process to allow for collaborative working which in turn creates the most effective process for learning [18]. In support of our findings, it advocates compassionate communication with staff which enables staff to maintain self-efficacy through the process, which is protective against trauma [19, 20].

Participants benefited from reflecting on and sharing their experiences of being involved in an investigation. It is often through telling a story that its meaning becomes significant and the value of 'talking therapies'

has been widely recognised [21, 22]. Nevertheless, this is not always evident in staff engagement with reflective sessions or clinical supervision, when they are offered, which could be associated with a 'felt stigma' associated with seeking psychological support. The evidence clearly recommends that psychological support is embedded within standardised investigation support rather than it being something additional or optional.

When we have long periods of no information and are unsure of who we can talk to, feelings of guilt and shame are emphasised. This sense of wrongness at the incident, the disconnection driven by guilt and shame leads to moral injury [23]. Ultimately moral injury can create PTSD or a decrease in compassionate care which we know is vital for patients and families. Psychological support will aid staff's understanding of the incident and decrease the burden of moral injury [23]. Further, what is required is that investigation procedures are couched within a psychologically

informed environment [13]. That is an environment which advocates proximity to others, being connected with colleagues, and facilitating the sharing of similar experiences, which were identified in this study as supportive.

Limitations

This a single centre study in a select group of PCC HCPs. The incidents and the investigation processes may not reflect those of different populations and healthcare cultures. The work does, however, provide a template for supportive investigation processes that could be tested and adapted to other populations. The sample is broadly representative of nurses and doctors but may not reflect the experiences of other allied health practitioners and may have missed interprofessional differences.

Implications for practice

We developed a Care Pathway for Serious Investigations (see Table 2) which outlines a ‘feelings first’ investigation process, designed to take place within a psychologically safe environment and informed by our empirical evidence. It outlines what materials need to be provided prior to an incident, recommendations for informing staff about the investigation, the investigation itself, peer support, reviewing the outcome, and process evaluation. Transparent information related to procedure, possible outcomes, and timeline are essential components. Moreover, embedded within the process is peer support from a colleague who has already undergone an investigation themselves and the presence of a psychologist at investigation meetings.

Further work is required to pilot and evaluate this process to demonstrate its likely benefits in relation to the reduction of moral injury. In addition, buy-in from regulatory and professional bodies is required to test the procedure more widely, but also to recognise the need for psychologically safe environments and processes, especially surrounding serious investigations, to prevent staff harm.

Conclusion

This study has explored HCPs’ experiences of being involved in an investigation at work. It has identified four areas requiring attention to improve the experience of being investigated: the emotions attached to the incident leading to the investigation and the investigation itself need to be prioritised; the investigation process needs to be transparent to prevent unnecessary feelings of isolation or vulnerability associated with not knowing what will happen next; communication about the investigation needs to be structured, and embedded within that should be opportunities

to debrief following investigation meetings; finally, peer support and psychological support need to be made available as part of the process, not optional additions, which would enable reflective learning and action planning for future safety in practice following an investigation. We have developed an evidence-based Care Pathway for Serious Investigations which requires evaluation to demonstrate its effectiveness in the prevention of moral injury and the improvement of staff wellbeing within the investigation process.

Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1007/s44253-024-00039-0>.

Supplementary Material 1

Acknowledgements

The authors wish to thank each individual who kindly took part in this study. The authors also wish to thank the leadership team on PCC for enabling this study to take place.

Author contributions

RM, RS, SW, HSS, HD, IB conceptualised the study. RM, RS, and EY oversaw and engaged in data collection. All authors contributed to data analysis to some extent. All authors contributed to the writing and revising of the manuscript.

Funding

This work was supported by Birmingham Women’s and Children’s Hospital Charity Paediatric Intensive Care funds, Ref: 37-6-124.

Data availability

No data are available.

Code Availability

Not applicable.

Declarations

Ethical considerations

The study was approved by the Health Research Authority (20/HRA/3817) and Aston University Research Ethics Committee (UREC280719). Permission was granted by the hospital’s Research and Development department. Informed consent was provided. This included audio-recording of the interview and use of verbatim quotations.

Competing interests

The authors have no relevant financial or non-financial interests to disclose. The authors have no competing interests to declare that are relevant to the content of this article.

Received: 26 January 2024 / Accepted: 9 April 2024

Published online: 23 April 2024

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