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# The Different Challenges in Being an Adult Versus a Pediatric Intensivist

**OBJECTIVES:** There is little current research comparing stress, burnout, and resilience in pediatric and adult intensive care practitioners. This article analyzes data derived from a 2018 qualitative study of burnout and resilience among ICU providers to explore differences that may exist between the pediatric and adult domains of practice.

**DESIGN:** This study represents a thematic subanalysis of textual data derived from a larger qualitative study of ICU provider burnout and resilience.

**SETTING:** Six international critical care units (Australia, Israel, United States).

**SUBJECTS:** Physicians working at the above sites who had been practicing as intensivists for a minimum period of 4 years.

**INTERVENTIONS:** None.

**MEASUREMENTS AND MAIN RESULTS:** Data were collected using a semi-structured interview process, and resulting transcripts were analyzed using post-positivist framework analysis. A secondary analysis was then performed separately on pediatric and adult datasets using the initial coding framework as a template. Three themes related to perceived differences were noted: differences in the patient characteristics within both cohorts, differences in the relationships between staff and family, and personal biases of individual intensivists. Pediatric and adult practitioners differed in their perceptions of the patient's perceived responsibility for their illness. Emotional responses to the stressor of child abuse (particularly as they related to clinician-family relationships) also differed. The stress of dealing with family expectations of patient survival even in dire circumstances was unique to the pediatric environment. Both pediatric and adult practitioners commented on the perceived difficulty of assuming the opposite role. Differences in life expectancy and mortality rate were significant factors in this.

**CONCLUSIONS:** Although similar stressors exist within each group, meaningful differences in how these are perceived and personally processed by individual clinicians exist. Better understanding of these differences will assist attempts to enhance the resilience and provide career guidance to aspiring intensive care clinicians.

**KEY WORDS:** adult intensive care; burnout; pediatric intensive care; resilience; stress; well-being

Critical care units have become a mainstay of both adult and pediatric tertiary and quaternary healthcares since the mid-20th century. These complex sociotechnical clinical teams enable much of the complex, yet reliable, medical and surgical cares that patients have come to expect from the healthcare system. Performing in these challenging environments takes a significant toll on practitioners. Estimates of burnout rates vary widely within the literature, with two recent reviews indicating rates as high as 47–70% (1, 2). Clinician burnout is considered a side effect of practicing in this environment without adequate recovery from stressors. It has been associated with moral

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distress, depersonalization, posttraumatic stress disorder, significant medical error, and practical consequences as early retirement, depriving the workforce of experienced personnel (3–5). It is thus critical that a deeper understanding of the factors that lead to burnout among intensivists is reached.

Pediatric and adult ICUs represent distinct environments, with different patterns of illness and, therefore, potentially different stressors. For example, significant disparities in mortality rates exist between pediatric and ICU environments with recent estimates of PICU in-unit mortality of 2.4–5% and adult ICU in-unit mortality of approximately 19% (6, 7). The potential effect of this difference on provider emotional state and satisfaction is illustrated by a 2019 study, demonstrating relatively similar satisfaction with life scores among PICU providers compared with nonintensive care healthcare providers despite high levels of burnout (8).

An important counterpoint to the concepts of healthcare worker emotional distress and burnout is resilience. Although no one unifying definition of resilience exists, key components have been noted to include the ability to adapt, adjust, and transcend stressful and traumatic circumstances (9). As with burnout, no comparative data exist that delineate between adult and pediatric providers, which may be useful in not only enhancing the lives of current providers but also offer important insights for career counseling.

In 2018, our group embarked on a qualitative study of the phenomena of burnout and resilience as it applies to ICU physicians. This article represents a subanalysis of this larger study focused on the exploration of differences in perceived stressors experienced by adult and PICU providers.

## MATERIALS AND METHODS

### Study Design

**Setting.** This qualitative study involved data collection at six ICU sites: two in Australia (Sir Charles Gairdner Hospital, Perth, WA, Australia; Austin Hospital, Melbourne, VIC, Australia), one in Israel (Hadassah University Hospital), and three in the United States (Children's Hospital of Chicago, Chicago, IL; Children's Hospital of Alabama, Birmingham, AL; and Norton Children's Hospital, Louisville, KY).

Ethical approval was granted by Sir Charles Gairdner Hospital (Lead site: RGS0794), Austin Hospital

(HREC/18/OTHER/14), Hadassah University Hospital (0313-18HMO), Children's Hospital of Chicago (Institutional Review Board [IRB] 2019-2722), University of Alabama, Birmingham (IRB-300000422), and University of Louisville (IRB 19.0683). The study was registered in the Australia New Zealand Clinical Trials Registry (ACTRN12619001314112).

**Participants.** Participants were ICU doctors who had been practicing as intensivists for a minimum period of 4 years. Experienced clinicians were targeted, on the basis that they might have developed coping skills while working in the field. Intensivists were screened by each site investigator, and those meeting criteria were given a participant information sheet and asked to provide consent. After six interviews were undertaken at the first site (Israel), investigators agreed that thematic sufficiency was obtained on the basis that the initial study aims to explore differences that were met for that site (10). A minimum of six subjects were interviewed at each site subsequently.

**Interview Tool.** In order to capture the emotional and behavioral responses of intensivists to stressors in the ICU, a semistructured interview outline was developed by investigators following review of existing tools (11, 12). Initial interviews took place in adult ICUs. One or two interviewers conducted a face-to-face audiorecorded interview with each participant. As information was gathered, the script evolved iteratively from one participant to the next when new themes emerged from the narratives provided. This process is consistent with both inductive and deductive qualitative methods. Three pediatric sites were subsequently added. The final interview script (**Appendix 1**, <http://links.lww.com/CCX/A941>) included the following question that underpins the results reported here, relating to the differences between the adult and pediatric providers:

“Do you think there are different challenges for the pediatric Intensivist versus the adult Intensivist?”

### Study Implementation

Between September 2018 and May 2021, 41 face-to-face intensivist interviews (pediatric,  $n = 22$ ; adult,  $n = 19$ ) were undertaken in Jerusalem ( $n = 6$ ); Perth ( $n = 7$ ), Melbourne ( $n = 6$ ), Chicago ( $n = 8$ ), Birmingham

( $n = 7$ ), and Louisville ( $n = 7$ ). Data were stratified by country, whereby all adult data were from Australia and Israel, and most pediatric data were from the United States. Audio interviews were transcribed verbatim and then sent to the interviewees individually for approval and correction.

## Data Analysis

A Framework Analysis (13) method was used with investigators adopting a postpositive approach, with the NVivo Version 12, 2018 software (QRS, Victoria, VIC, Australia). The adult dataset was analyzed first, with two investigators independently coding two transcripts to develop a set of codes. These were discussed and agreed upon by all investigators, and a unique codebook was created. All transcripts were then independently coded, each by two investigators. One investigator (D.D.) coded all the transcripts, and other investigators (P.v.H., R.K., C.K.) shared approximately one-third of the transcripts as the second coder.

Five investigators then reviewed the pediatric dataset (D.D., P.v.H., R.K., C.K., S.Z.) that was then independently coded for differences by two investigators (D.D., S.Z.), addressing the reflexivity of analysis. Differences noted in the pediatric data were discussed and then iteratively added as new codes to the codebook. The whole dataset was then reevaluated using the new codebook (D.D.). Common themes and subthemes were identified and reviewed to make sure they fit the data (D.D., P.v.H., R.K., S.Z.). Interrelating themes were also recognized to interpret the meaning of the themes.

## RESULTS

Of the 41 interviewees, 40 returned approved transcripts that were combined into the final dataset that consisted of 723 pages. Near-equal representation of pediatric ( $n = 21$ ) and adult ( $n = 19$ ) participants was achieved, although a higher proportion of females in the pediatric subgroup (76%) and males in the adult subgroup (79%) was noted.

Three themes emerged from qualitative analysis of the comments regarding perceived similarities and differences between the pediatric and adult intensivists. These themes related to patient characteristics within both cohorts (**Table 1**), relationships between staff

and family (**Table 2**), and personal biases of individual intensivists (**Table 3**).

## Patient Characteristics

The largest subtheme relating to patient characteristics in the adult ICU versus the PICU was the etiology of admission. Adults were often recognized as having had a causal role in the decline of their health that resulted in them requiring ICU care, whereas children were largely seen as “innocent” to contributing factors. Another subtheme that emerged was the greater un-lived potential of children compared with that of adults. Adolescents were a particularly challenging cohort of patients as they were old enough to understand the life milestones they would never reach. Despite the perceived difficulties surrounding the management of sick children, it was ultimately construed that there is no hierarchy of life. That is, regardless of patient age, there is equal sadness and relatability in every death. An interesting subtheme that impacted both positively and negatively on stress levels was patient prognosis. With a much lower mortality rate in the PICU, pediatric patients are mostly expected to survive their stay in the PICU. This was often seen as comforting by pediatric intensivists. This expected outcome, however, in a child who is likely to die can create more pressure in these situations, as death is not seen as an acceptable outcome regardless of the child’s severity of illness. Conversely, a sick adult admitted to the ICU has a lower likelihood of surviving their stay, and some interviewees suggested that this knowledge can also reduce stress among adult intensivists, albeit for different reasons.

## Relationship With Family

Six subthemes arose relating to staff relationships with family: dysfunction, decision-making, expectations, reward, and sequelae of abuse, or assault. Although dysfunctional family dynamics were often expected, the extent to which it was prevalent in the PICU was sometimes unanticipated and considered demanding. Decision-making in the PICU was seen to largely involve the patient’s close family members rather than the patient themselves. Although this sometimes happened in adults, many patients had previously asserted their wishes regarding invasive treatments and end-of-life care either informally to families or via formalized

**TABLE 1.**  
**Theme 1: Similarities and Differences Between Adults and Pediatric Intensivists’ Experiences Relating to Patient Characteristics**

Subtheme	Verbatim Quotation Supporting Choice of Coding
Etiology	<p>Pediatric</p> <p>“Kids are not generally responsible for what happens to them. Adults, with the exception of some things, like accidents and things which are uncontrollable, a lot of adult medical ICU, not necessarily surgical ICU, a lot of those are evolutionary products of whatever is going on. Those things are not really... You’re reaching terminal standpoint of things that occur acutely... I think you sort of feel... I think you can get tied into your patients a little more in paedics than what you do in the adult side. I think it’s a little bit easier to be a little bit more objective and say, you know, ‘They didn’t make their clinic visit today, it’s not my fault! Or if they have not been taking care of their diabetes for the last five years, and they come in post infarct secondary to bad vascular disease, there’s only so much I can do for that. I mean, I may be able to get them through this or I may not; but I can’t fix what’s there to begin with, it’s sort of where it’s at. Whereas in kids you can sort of say, ‘They didn’t really choose one way or the other’ and so you sort of look at it... Or at least, that’s the way I look at it.”</p>
Future potential versus “a life is a life”	<p>Adult</p> <p>“I think the same things are probably there because a life is a life. How can you say more valuable for a mother of three versus someone who has not had children versus a child versus someone who has raised three generations and been married for 60 years or something that? I think again some of it is how you relate personally. I think sometimes I find it really quite emotional talking to the surviving partner of an old couple who have been together forever because I think how it was for my mother when my father died and she was kind of left. But then someone who’s got a teenage child might relates to a situation when you’re dealing with a teenager or someone who is just have a baby looking after that. So I think a lot of it is how we relate to situations and how we put meaning on them from our own personal responses.”</p> <p>Pediatric</p> <p>“There is an expectation. There’s something special about children. There’s this ‘potential’ for children. I look at my patient who is nine months old, and wonder, ‘Could this kid be the president some day?’ you’re not looking at an 88 year old grandma and thinking could she be president one day, you’re looking back on her life, and seeing all the cool things she did... So we’re trying to... I would love to not have a job; I would love if we did not need pediatric intensive care physicians, but we do. Yeah... but I think of every child as like, ‘What is their maximum potential?’ ‘What are they gonna go do? What are they going to want to do?’ And I’ll often say things like that to parents, to help.... Because you’ll see the parents are having a bad day, or something. They might just be breaking because it’s been five days and it feels like nothing has changed, and I might be looking at numbers, and see that actually, things are a little better today. Sometimes I’ll have to talk to parents and say, ‘look, you know, our expectation of what your child is doing, and how they respond to therapies, is that they’re going to survive’. In my expectation, you know I’ll say to them, ‘if they want to go to college, they’ll go to college; if they want to be president, they should be able to be president; but they shouldn’t want to be president!’”</p>
Likelihood of poor outcome	<p>Adult</p> <p>“I guess when I first started in ICU I thought of that [palliative role] as a disappointment or as a thing that was not sort of... I grumbled, but it was not our core business, but now I actually don’t mind doing that in that I think that it is probably our role as well, because we probably see from the start to the end a bit better than some of the other specialties.”</p> <p>Pediatric</p> <p>“The likelihood of good outcomes in the PICU is far higher than it is in adult ICUs. You know mortality rates in pediatric critical care units are in the low single digits, versus adult units, where it is 20, 25, 30%. So I think on the flipside, one of the things I remind myself is that the vast majority of kids that come in requiring our services in the ICU are going to get better and leave, and be essentially in the same condition they were before they came in.”</p>
Expectation	<p>Pediatric</p> <p>“I think pediatrics... I think a little bit because people expect their parents to die; they don’t expect their children to die. You plan for your parents to die; albeit, it’s very sad, when you lose a parent or a spouse but people who are in their 70s, they have lived a long life; people who are seven months old, most people aren’t ready for that. And so I think that burden... “</p>

**TABLE 2.****Theme 2: Similarities and Differences Between Adults and Pediatric Intensivists' Experiences Relating to Their Relationship With Family**

Subtheme	Verbatim quotation supporting choice of coding
Family dysfunction	<p>Adult            "...you have a dysfunctional family, well beyond whatever it is that you do or say, they are already in full-blown intra-family conflict, where an adverse event then becomes actually a tool for enlarged and more aggressive intra-family conflict."</p> <p>Pediatric            "Dealing with the family's was not a surprise to me; the sad state of affairs with many families was a surprise; I did not expect to have as many dysfunctional families as we deal with."</p>
Autonomy versus surrogacy in decision-making	<p>Adult            "he came down to us and he said... He wasn't intubated at that time, he'd been to the ward and came back... He said "I want to die, and I've had enough; this is enough for me". And his family were all on board... the outcome was that he died fairly quickly, but comfortably, and the family, after initially being quite upset, were very thankful and appreciated all of the help from the ICU..."</p> <p>Pediatric            "Lots of times we may be talking about surrogates for our patient, that's our norm.... On the adult side you might.... I could be an adult if I was in a car crash and maybe if my head wasn't injured, you could talk to me and asked me what I wanted to have done for me, but there will be cases in the adult unit where it's grandma... I remember my grandma being in a unit with Alzheimer's dementia and a broken hip. And we were having to make decisions for her. And that's a different dynamic than actually talking to your patient. In my patients, it's a rarity that I can talk to my patient and ask them what they want me to do, or offer them. Most often I am going to a parent, I partner with a parent, to help them understand what the right thing is for their loved one, their child. So I think that those dynamics make things a little bit different."</p>
Expectations	<p>Adult            "The family became aggressive and started demanding new treatments... I was away for three days, I came back and the father was on the phone, "No, you have to do this you have to do that, I want adrenaline, I want this I want that... "</p> <p>Pediatric            "I think a lot of the stress for me is actually involved in the interactions with the families because I also think that families expect their children to survive the PICU stay. Often. Whereas a 90-year-old man, the family may not have that same expectation. And so managing family expectation is one of the hardest things actually for me as an Intensivist. The love bond that the parent has for their child I think is probably one of the strongest really, the strongest relationship that exists. So it's quite stressful to actually manage parents and families. I think it's one of the most challenging and emotionally taxing thing for me as an Intensivist."</p>
Reward	<p>Adult            "...although dealing with people in end-of-life situations is tough, it's also a rewarding part of the job because you have the opportunity to meet people at this awful time for them and make a positive difference I guess. And I think also that it is kind of life affirming in a way."</p> <p>Pediatric            "Because I like working with kids, interacting with children; I'd like to... I like the idea and the ability... we are in a unique position to really care for patients and families at a desperate, terrible time, and even if there is a situation where you can't physically save the patient, hopefully I can be there to be compassionate and not ease the situation, but help them...somehow..."</p>
Sequelae of abuse or assault	<p>Adult            "...we had a particularly brutal murder complicated by self-inflicted injuries to try and deflect the blame. And both patients were being treated in the resus area together and... the perpetrator survived, and the victim didn't. There was a lot of talk around why we were spending so much time on the perpetrator and not leaving him alone while we dealt with the victim."</p> <p>Pediatric            "There were a couple of situations where I was just angry. And those were some child-abuse situations. And then it takes real effort not to be angry at who you believe the perpetrator to be. And unfortunately for a couple of them, it went to a trial; so a year later you're having to go and testify, and so it riles it up..."</p>

**TABLE 3.**  
**Theme 3: Similarities and Differences Between Adults and Pediatric Intensivists’ Experiences Relating to Their Personal Orientation**

Subtheme	Verbatim Quotation Supporting Choice of Coding
Deliberate choice	<p>Adult</p> <p>“I couldn’t do it. I couldn’t do it. Yes since I’ve had my children I don’t like it. So I find... My first specialty was anaesthetics, and I avoid pediatric anaesthetics now as well. I don’t like it. I just feel like... I feel like I’d come to work and upset kids and torture them, and see the look on their faces. Even when I walk through recovery with kids crying, I feel like... I feel... I don’t like it. And then pediatric ICU, I could never do it. That’s why I have deliberately chosen an adult hospital. If something happened in this hospital which needed my assistance, then of course I would help, but I generally avoid pediatrics - I don’t like it. And more so since I’ve had my children, I don’t like it. Yeah, emotionally I’d find it very upsetting.”</p> <p>Pediatric</p> <p>“And then I would walk through their unit, every day and see all of the old people and would cry every day. I couldn’t look at them because all I saw were all of these people’s wonderful lives, this is how they are ending up. Because the vast majority of them died. I mean, they would have 30 to 40% mortality. And you’d see them working on..., every once in a while they would bring successes too but I would just see terrible sadness there. I see this guy who was a university professor, I see this guy you know, with all his grandchildren coming to visit him and to me that was tremendous sadness. I didn’t know how they could do it... I couldn’t do it, and I spent many years with my father in the ICU, on the other end of it, so, so that’s a whole another, you know... Being a consumer on the other end of the ICU...”</p>
Relatability	<p>Pediatric</p> <p>“Yeah, you know it coming in... It was a little harder as my kids... Like you can see your kids in each kid. ... so when you look at a patient that looks like your kid, I find that to be a stressor that I did not anticipate. You know, when you see a kid lying in the bed not doing well, that looks like your child, it’s harder to separate yourself from that emotion... As like a young doctor, it wasn’t something you really think about. And you know, when you are doing ER medicine as a Resident or floor medicine, you don’t appreciate it as much. Especially when the onus isn’t all yours. At the end of the day, as an Attending, you sign the death certificate. There is no-one behind you checking your work; I think that weight is heavy. Like, ‘If this kid dies, I could be a contributor.’ Even indirectly.”</p>
Judgment of others	<p>Pediatric</p> <p>“...It makes people very aghast that you would choose to do this work. And I think that’s one of the hardest things... Like, ‘How can you?’; ‘I couldn’t do that...’; ‘That would break my heart, how can you work in that kind of environment?’; ‘Almost like, ‘How can you be a person that does that?’; ‘Don’t you have feelings?’ The most frequent thing that people say is, ‘I could never do that, because I love children too much.’ And you’re like... I’m trying to keep children from dying! I think that’s one of the hardest things is navigating the ‘outside of work’...”</p>

healthcare directives, thereby simplifying these interactions to some extent. These decision-making differences reflected a degree of preparation for death in adulthood, the unanticipated nature of pediatric death, and the relative age of the patient as it correlates with their understanding of their illness and its prognosis. Given overall lower PICU mortality rates, managing family expectations of child survival was seen as a stressor in the PICU. The challenge of assisting families that negotiates a person’s critical illness was seen as a privilege by both adult and pediatric intensivists. The unique opportunity to help families deal with the often unexpected and premature death of a child was seen

as particularly rewarding in pediatrics. Although comments related to the stress of managing abuse or assault cases were present in both fields, particularly when the perpetrator is (or may be) present in the healthcare environment, the possibility of testifying against alleged abusers was particular to the PICU (Table 2).

### Personal Orientation

We identified three subthemes addressing the personal orientation of individual intensivists: deliberate choice, relatability, and the judgment of others. Both adult and pediatric intensivists described patient age as a key factor in career choice. Adult intensivists commonly

said, “they could never work in the PICU” for various reasons, and pediatric intensivists said the same of the adult ICU. This phenomenon overlapped somewhat with the theme of relatability. Having children of their own was the most cited reason for difficulties undertaking PICU work. This was also sometimes seen as a mitigating factor for psychologic trauma, however, and many stated that going home and appreciating their own healthy children resulted in heightened personal gratitude. The subtheme of the “judgment of others” meant that some PICU doctors paradoxically felt they were often perceived as emotionless or uncaring by others outside the field of healthcare. This subtheme was not detected in the interviewed adult intensivists cohort.

## DISCUSSION

As far as we know, this is the first structured qualitative report (14) comparing the thoughts and attitudes among adult and PICU intensivists relating to their work. By examining the source of the individual quotations of which the themes are comprised, a few key comparisons between these two groups of providers can be highlighted.

A positive point of connection is the way each group experienced the emotional rewards of their work. Despite the difficulty of the clinical situations they experienced, both groups used terms such as “life-affirming,” “honour,” and “privilege” in reference to the perceived beneficent care they provided for the patients and families. This capacity to make a positive impact appeared to be a sustaining aspect of critical care practice regardless of patient population.

Although each group noted similar external stressors, the most common circumstances under which these stressors are encountered seem to differ. For example, one adult provider shared a story in which a victim and the perpetrator of their injuries were receiving care simultaneously and voiced a degree of moral distress over the care they were providing to the perpetrator (Table 2). This appears similar in many ways to the shared experience of pediatric intensivists when caring for child abuse victims, where the perpetrator may also be believed to be present. Although the victim-abuser dynamic is present in both settings, it appears more common in the pediatric setting where the patient is invariably in a position of dependence.

Notably, both groups reported the presence of stressful family interactions in which relatives demanded levels of care that the team felt were futile, disproportionate, or unrealistic given the circumstances.

Participants also noted significant differences in their perception of both the causative factors and outcomes of the illnesses they treat. These differences seemed to significantly impact their emotional response to their work. In terms of causative factors, a common perception was that the conditions children faced were generally through no fault of their own. In contrast, the conditions faced by many adult ICU patients seemed to have some link to cumulative lifestyle choices or behaviors. For some PICU practitioners, this resulted in greater perceived moral distress but paradoxically also served as a core motive that led them to enter the field of pediatric care. This perception of a child’s innocence also seemed to contribute to greater distress when faced with the sequelae of abusive trauma. Regardless of an individual’s personal responsibility for their illness, when any patient is deemed unwell enough to require the care of the ICU team, all stated that pragmatic steps are taken to ensure the best possible patient outcome regardless of perceived cause. This common thread was underpinned by an ethos that sees all life as sacred and equitable access to world-class healthcare for all patients as a primary goal.

As previously noted, the significant differential of mortality rates between pediatric and adult ICUs was reflected in many of the comments dealing with the outcomes of illness. Concepts raised regarding death in the pediatric population focused on its premature and unexpected nature, especially given the overall low mortality rate. Interestingly, mortality rates were often discussed with explicit reference to the adult ICU population, in which death is more common. A sense of “lost potential” when pediatric death occurs was also raised. As one subject said, “I look at my patient who is nine months old, and wonder, ‘Could this kid be the president some day?’” There was an enduring sense among pediatric providers that deaths in the pediatric setting were often harder to reconcile.

Interestingly, the adult intensivists’ comments did not support this and focused more on the difficulties encountered by families at the loss of a valued loved one. One adult provider stated, “How can you say ‘more valuable’ for a mother of three versus someone who has not had children versus a child versus someone

who has raised three generations and been married for 60 years?” Although more work is needed to explore the psychologic factors underpinning these perceptions, these comments suggest that both adult and pediatric provider groups experience similar stressors in this area, despite the overall difference in “expected” survival and the perception that the other group experiences less stress. Comparisons between them made by individual providers may well be attempts to rationalize the difficulty of both experiences rather than real observations about differences in how these groups perceive death and dying.

The differences in mortality and expectations of outcome for patient cohorts also seemed to create different perceptions of the value of “heroic” interventions such as extracorporeal membrane oxygenation (ECMO). The adult intensivist cohort, interviewed prior to wider severe acute respiratory syndrome coronavirus 2 pandemic-associated ECMO utilization, shared their sense that these were futile interventions. The pediatric group was far more willing to employ “heroic” interventions, even in dire circumstances where survival was not expected. This seemed largely related to the sense of lost “potential” when a child dies. The role of the ICU in palliation was common in participants, with care of the family and the privilege of the partnership frequently reflected upon even in the instance of palliative care.

The comparative factors listed above appeared to have impacted career development, whereby both adult and pediatric practitioners arrived at the conclusion that they could not serve in the other’s role. One emergent subtheme with particular relevance to pediatrics was the perceived “judgment of others.” One subject movingly described a conversation with a community-based friend who asked them to describe their job. When told, the friend replied, “That would break my heart, how can you work in that kind of environment?” Although such comments may also pertain to adult providers, they did not appear within our dataset of interviewee responses. It is also worth noting that several respondents introduced a necessary distinction within the pediatric intensivist population between those with children and those without. Given the comments provided, having children representing a potentially transformative event in how this population views their practice, but as our study did not specifically focus on this, we lack the data to explore it

further. Additional research will be needed to further clarify the role of parenthood within the experience of pediatric intensivists.

A striking observation is the way significant similarities in stressors noted between both groups are paired with a sense that the other group, “has it worse.” Although our data do not address this directly, it is at least arguable that this perception could represent the employment of some type of compensatory mechanism when faced with difficulties in the clinical domain.

This study has several limitations. First, it is important to acknowledge that the vast majority of providers studied practiced in either the adult or pediatric environment. Although it is possible that a few may have experience in both, the demographics we collected do not enable us to determine this, and thus, the comments of each cohort regarding the experience of the other must be regarded as speculative. There are also a number of potential differences between these environments, such as levels of available scientific evidence and patterns of communication, that were not commented on by our participants, but which may be more apparent to those practicing in both domains. In addition, as the interview script iteratively evolved, new questions were not explored with prior participants. Given these constraints, a follow-up study focusing on this group may be warranted. Still, as a study oriented primarily to provider perceptions, our current observations do shed light on the thought processes present within both groups and, thus, represent valuable information.

Next, although every attempt was made to purposively sample a relevant population of providers, we were inevitably limited to the total number of interviews that were conducted in only three “high-income” countries. There is, therefore, a distinct possibility that unidentified themes and stressors exist. However, to truly assure data saturation, we would have had to sample many more intensivists in many more countries, which was beyond what was practicable. Another bias unaccounted for was that adult ICU providers were interviewed earlier than pediatric providers. The extent to which gender influenced perceptions of differences between the ICU environments is a further limitation, although these gender differences mirror the gender distribution in the specialty of intensive care medicine in these countries across pediatrics and adults. Finally, it must be noted that, due to the structure of our recruitment process, all



of the pediatric providers interviewed are based in the United States, whereas all adult providers were based in Australia and Israel. This raises the possibility that our observations may be influenced by national and cultural factors. Further studies of this issue should take this into account.

## CONCLUSIONS

As we seek to equip providers with the necessary knowledge and skills to manage burnout and promote resilience, a clear, reflective knowledge of the potential stressors they may encounter forms a critical tool in our armamentarium. It is our hope that this portrayal of the experiences and stressors present in the pediatric and adult ICU domains will be of value to trainees interested in intensive care medicine who are trying to determine which patient population best fits them. By considering the above themes while making career decisions, it may be possible for them to gain a clearer sense of the emotional experiences present in both fields and, hence, determine which will be more manageable given their personal makeup. It is our hope that the themes generated here can assist ICU providers in counseling trainees regarding career choices in order to enhance their career satisfaction and their longevity in the field, as well as develop personal mechanisms to promote their own resilience.

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