

The AAP Resilience in the Face of Grief and Loss Curriculum

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A career in pediatrics can bring great joy and satisfaction. It can also be challenging and lead some providers to manifest burnout and depression. A curriculum designed to help pediatric health providers acquire resilience and adaptive skills may be a key element in transforming times of anxiety and grief into rewarding professional experiences. The need for this curriculum was identified by the American Academy of Pediatrics Section on Medical Students, Residents and Fellowship Trainees. A working group of educators developed this curriculum to address the professional attitudes, knowledge, and skills essential to thrive despite the many stressors inevitable in clinical care. Fourteen modules incorporating adult learning theory were developed. The first 2 sections of the curriculum address the knowledge and skills to approach disclosure of life-altering diagnoses, and the second 2 sections focus on the provider's responses to difficult patient care experiences and their needs to develop strategies to maintain their own well-being. This curriculum addresses the intellectual and emotional characteristics patient care medical professionals need to provide high-quality, compassionate care while also addressing active and intentional ways to maintain personal wellness and resilience.

A career in pediatrics can bring great joy and satisfaction through connecting with patients and families, providing service to others, helping children recover from illness and thrive, and working within a high-touch health care community. However, this career also brings challenges from the inevitable high-intensity situations that arise around uncertain medical diagnoses and prognoses, medical errors, and emotionally charged communication with families about life-altering diagnoses and patient death.

Medical school, residency, and fellowship training are both physically and emotionally demanding. How a person responds to these demands is a major determinant of well-being.

Workplace stresses may lead to burnout and depression.¹⁻³ Burnout is a particularly significant problem that can limit a provider's effectiveness by increasing depersonalization or distancing from patients, reducing caring interactions, and increasing medical errors.^{1,4,5}

Studies have shown that burnout can begin during training and continue into practice. For example, rates of burnout range from 28% to 45% in medical students and from 27% to 75% in residents,^{1,6} which are higher than rates in age-matched trainees in other fields. Furthermore, this imbalance compared with the general population continues through years in practice as physician burnout prevalence rates have continued to

abstract

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increase significantly even when measured over the brief interval from 2011 to 2014.⁷

As many as 20% of pediatric residents may be depressed⁶. Although the change in duty hours in 2003 resulted in a small decrease in the prevalence of burnout in pediatric residents from 75% to 57%, there was no change in the rate of depression.⁶ Equally worrisome are the rates of death by suicide, which are higher in both male and female physicians in practice than in age-matched peers in other professions.⁸ The high rates of burnout and depression also suggest that the stresses of medical practice are not limited to a few vulnerable individuals but are a cultural and professional problem that is relevant to physicians across the educational continuum.

These data reinforce the urgent need for action. In fact, the Symposium on Physician Well-Being convened by the Accreditation Council on Graduate Medical Education in 2015 concluded that organizational-level interventions are now needed to address critical gaps in training and curricular factors.^{1,9,10} That is, because residency is a formative experience and residents often practice in the way they are trained,^{11,12} it is critical to address concepts of wellness and burnout prevention during training so physicians can learn and practice positive resilience strategies that will serve them for years in the future.

The Milestone Project developed by the Pediatric Residency Review Committee and the Accreditation Council on Graduate Medical Education focused on the competency of professionalism and humanism to help promote and demonstrate the value of provider relationships and interactions with patients. To be effective as compassionate and humanistic practitioners, it is imperative to follow the advice of Candib: “The secret of the care of

the patient is to care for oneself while caring for the patient.”¹³ In keeping with this guideline, the American Academy of Pediatrics (AAP) Resilience in the Face of Grief and Loss Curriculum was developed to address specific milestones and provide opportunities for learners to develop skills to reflect on and address stressors in clinical care while maintaining their compassion and humanism. We believe that enhancing physicians’ resilience and adaptive skills can help transform times of anxiety and grief into rewarding professional growth experiences.

NEED FOR THIS CURRICULAR INTERVENTION

Driven by growing data and personal experience with the emotional toll of medical training and practice, the AAP Section on Medical Students, Residents and Fellowship Trainees requested a method to address management of the grief and loss health care professionals inevitably face during their careers. This pressing need was endorsed by the AAP Section on Hospice and Palliative Medicine, which sponsored the development of this curriculum. The chair of this section reached out to educators with expertise in this area, and a working group was convened to develop the curriculum. The educators were from medical institutions across the country, had past experience or interest in this area, and had expertise in the education of medical students, residents, and fellows. These educators included members of the AAP, the Academic Pediatric Association, the Association of Pediatric Program Directors (APPD), and the Council on Medical Student Education in Pediatrics (COMSEP). The goal was to develop a curriculum that addressed the professional attitudes, knowledge, and skills needed to thrive despite the many stressors inevitable in

clinical care. Although the initial focus was addressing grief and loss, the working group expanded the curriculum to take a strength-based approach to enhance health, wellness, resilience, and burnout prevention.

Using L. Dee Fink’s Framework for Backward Design^{14,15} the working group identified the eventual impact of enhancing well-being and resilience while decreasing burnout in trainees. From there, the working group determined the learning goals and developed the teaching and learning activities that could accomplish these outcomes. Subgroups reviewed the most current research pertinent to foundational knowledge and educational interventions and identified illustrative videos and narratives to incorporate in the respective teaching modules.

The resilience curriculum incorporates principles of adult learning theory to activate previous learning and teach new skills by priming and making them relevant to previous experiences.¹⁶ It is learner centered and competency based, allowing instructors and learners to adapt the curriculum to different levels of training and types of experiences. The curriculum addresses the attitudes, knowledge, and skills needed to improve the care of patients and their families in times of serious or life-limiting illness.¹⁷ The first section (parts A and B) of the curriculum addresses educational topics on how to approach disclosure of a life-altering diagnosis or a medical error, medical uncertainty, discussions of goals of care, end-of-life issues, and patient death. The second section (parts C and D) of the curriculum focuses on providers’ responses to difficult patient care experiences and the resulting need to develop strategies to maintain personal well-being. Different components of the curriculum have been matched to the Pediatric

TABLE 1 National Forums for Review of the Curriculum

2013	Presented at the National Association of Pediatric Program Directors Curriculum Task Force. Group review and discussion of curricular components and feedback provided. Nashville, TN, April 12.
National Workshops	
2014	Bostwick S, Burke AE, Church A, Gogo A, Hofkosh D, King M, Linebarger J, McCabe M, Moon M, Osta A, Rana D, Sahler OJ, Smith K, Serwint J. Cultivating resilience during pediatric residency. Workshop presentation at the APPD meeting, April 4, Chicago, IL.
2015	Rana D, King M, Serwint JR, Moon M, Gogo A, Sahler OJ. Planting seeds of wellness and resilience into the pediatric clerkship curriculum. Workshop at COMSEP meeting. New Orleans, LA, March 14.
2015	King M, Bostwick S, Gogo A, Moon M, Serwint JR, Sahler OJ, Rana D. Facilitating critical incident debriefing for students: skills development for faculty. Workshop at COMSEP meeting, New Orleans, LA, March 14.
2015	Osta AD, Serwint JR, McCabe ME, Church AT, Burke AE. A roadmap to teach senior residents to facilitate debriefings after critical incidents. Workshop at APPD meeting, Orlando, FL, March 26.
2015	Serwint JR, Church AT, McCabe M, Burke AE, Hofkosh D, Gogo A, Osta A. Cultivating resilience as pediatric health care providers: teaching ourselves and our learners. Workshop at APPD meeting, Orlando, FL, March 27.
2015	Serwint JR, Osta AD, King M, Church A, Sahler OJ, McCabe M, Gogo A, Rana DT, Hofkosh D, Burke AE, Moon MR, Linebarger JS. Cultivating resilience in pediatric health care providers: teaching ourselves, our colleagues and our learners. PAS meeting workshop, San Diego, CA, April 25.
2016	Gogo A, Church A, King M, Rana D. New frontiers in medical education: planting seeds of resilience and wellness into the pediatric clerkship curriculum. Workshop at COMSEP meeting, St Louis, MO, April 9.
2016	Gogo A, Bostwick S, Burke A, Church A, Hofkosh D, McCabe M, Osta A, Serwint J. Resilience in the face of grief and loss. Workshop at APPD meeting, New Orleans, LA, April 1.

PAS, Pediatric Academic Societies.

Milestones Project, so the curriculum can serve as an adjunctive resource to address milestones within educational programs.

The modules were reviewed and edited by all authors through several drafts. We obtained additional feedback in adhering to Fink's framework through presentations at national meetings attended by a wide range of educators. Components of the curriculum were presented at several professional meetings (Table 1) specifically chosen to reach educators who interact with learners ranging from medical students to faculty. Feedback from participants was incorporated in subsequent revisions. The final 14 modules were also critically reviewed by multiple members of relevant AAP sections, committees, and councils: the Section on Hospice and Palliative Medicine; the Section on Community Pediatrics; the Section on Medical Students, Residents and Fellowship Trainees; the Section on Early

Career Physicians; the Committee on Bioethics; the Disaster Preparedness Advisory Council; and the Council on Children With Disabilities. Formative feedback from these reviews was also incorporated into the final version and refined the final curriculum.

None of the working group, meeting attendees, or reviewers were aware of a comparable curriculum. Such a curriculum was requested by the largest section within the AAP: the trainees themselves. Given the critical levels of burnout and depression among both physician trainees and physicians, early curriculum dissemination is prudent and essential even before formal evaluation.

OVERVIEW OF THE CURRICULUM

The working group deliberately created a curriculum for a broad audience, from medical students to experienced pediatricians, from academicians to community

providers, and from institutions with many educators or a few. Therefore, the curriculum can be used individually or in facilitated small group or large group discussion led by a faculty member or senior resident. The curriculum is divided into 2 sections and contains 14 modules. Experiential learning is fundamental to the resilience curriculum. Each module includes a learner's guide, a PowerPoint presentation, an annotated bibliography, and a toolbox with cases, videos, and narratives to allow individual reflection, group discussion, and skill development through practice and coaching. Cases presented in the curriculum are based on common professional and life experiences and provide the specificity and context adult learners seek. The case-based approach makes the curriculum particularly relevant to practice and allows learners to use their past experiences to better understand the conceptual frameworks taught. Learners may progress sequentially through the curriculum beginning with part A, or they may choose portions that are most relevant to their needs. Educators seeking to use the curriculum can do the same, selecting the components of the curriculum that best meet the objectives of their training environment and their learner group. The curriculum objectives reflect the Pediatric Milestones. Table 2 includes a summary of the objectives and links the objectives to relevant Pediatric Milestones.

COMPONENTS OF THE CURRICULUM

A brief summary of the curriculum is presented below.

Part A: Understanding Grief and Loss in Children and Their Families

Part A includes modules that address crucial medical knowledge needed by health care providers in understanding grief and loss in

children, understanding sibling grief, considering ethical issues at the end of life, and developing the spiritual humility needed to help families in difficult situations. The module on understanding grief and loss in children describes their needs at different stages of development. It also addresses how children with life-threatening illnesses understand their disease and how pediatricians can effectively share serious medical information with children. The module on understanding sibling grief and loss focuses on the brothers and sisters of seriously ill children. It addresses how to incorporate siblings in end-of-life care, understand the rituals surrounding death and memorialization, and provide bereavement care. Both of these modules include experiential activities such as videos and role play for individual and group reflection.

The module on ethics at the end of life engages learners in discussion and analysis of the ethical principles involved in establishing goals of care and end-of-life decision-making in pediatric patients. The learner's guide provides a sample case focused on questions of futility but emphasizes the value of using a case from the home institution to make the discussion more realistic and familiar. The case analysis guide provides instructors with a structured approach to case review and discussion. It is also intended for distribution to the learners so they may anticipate the structure of the discussion and have it readily available for future application and reflection.

Finally, the module on spiritual humility addresses an important but often neglected component of caring for children with life-limiting illnesses. The purpose of this module is to help learners understand the significant role of spiritual beliefs in the lives of many families, acquire skills to approach spiritual issues in a way that families

TABLE 2 Resilience in the Face of Grief and Loss Curriculum: Objectives and Linkages With Milestones

Part A: Understanding Grief and Loss in Children and Their Families	
Understanding Grief and Loss in Children	
1.1	Describe the overarching process of grief and loss, including: <ol style="list-style-type: none"> Components of grief: denial, anger, bargaining, depression, acceptance Difference between "normal" and "complicated" grief
1.2	Explain how the child's concept of death develops from toddlerhood through adolescence.
1.3	Demonstrate knowledge of the stages of acquisition of information that occur in children with life-threatening illnesses, including: <ol style="list-style-type: none"> What children understand and know as their disease progresses How to assist children's understanding in discussions of medical information
Relevant milestones: PBLI2, ICS2, PROF1	
Understanding Sibling Grief and Loss	
1.4	Describe common reactions and coping mechanisms of siblings with sick brothers or sisters, including: <ol style="list-style-type: none"> How children understand what it means to be sick and what causes sickness How illness in a brother or sister affects well siblings The child's development of the concept of death How siblings can be incorporated into end-of-life care of a terminally ill brother or sister How siblings grieve
Relevant milestones: PBLI2, ICS2, PROF1	
Ethics at the End of Life: Futility and Care	
1.5	Describe the ethical principles involved in end-of-life decision-making (eg, resuscitation and do-not-resuscitate orders) and discussion of goals of care: <ol style="list-style-type: none"> Develop capacity to identify ethical issues that complicate end-of-life experiences for patients, families, and providers. Discuss a simple method to describe and analyze ethical issues. Focus on issues of futility as a common and complex ethical concern. Develop strategies to help families and providers discuss and manage futility in a way that will help reduce burden on families and avoid excessive moral distress for providers.
Relevant milestones: PROF1, PROF2	
Spiritual Humility at the Time of Illness and Dying	
1.6	Understand how a person's beliefs, culture, and spirituality, as well as background and experiences, might affect their response to communication of sensitive information. <ol style="list-style-type: none"> Describe physician approaches to spiritual issues that families believe to be helpful when faced with life-limiting illness or death of a child. Demonstrate understanding of the specifics of different cultural or spiritual beliefs that may impact families and assist in their integration of the experience. Know how to incorporate a chaplain as an essential member of the health care team.
Relevant milestones: PROF1, PROF3, ICS1, ICS2	
Part B: Communicating With Families About Severe and Terminal Illness in Their Children	
2.1	Use skill in sharing bad news, including disclosure of a life-altering diagnosis, death of a patient, and occurrence of a medical error; specifically: <ol style="list-style-type: none"> Answer the question "Am I going to die?" posed by a 4-, 8-, and 15-y-old. Respond when a parent starts to cry in the middle of a conversation. Respond effectively when a parent exhibits anger. Be able to state, in under a minute, that a patient received a drug in error.
2.2	Skillfully lead a discussion of end-of-life issues and goals of care (eg, do-not-resuscitate measures) with a family whose child is severely or terminally ill.
Relevant milestones: PROF1, PROF6, ICS2	
Part C: Managing Emotions After Difficult Patient Care Experiences	
Managing Emotions After Challenging Patient Care Experiences	
3.1	Recognize how a physician's responses to grief and loss may either: <ol style="list-style-type: none"> Interfere with a patient's and family's experience and coping and distance the physician from the patient, OR Comfort the patient and family and help the physician cope
Relevant milestones: PBLI1, PROF3, PROF4, ICS2	
Dealing With Challenging Patient Care Experiences: Integrating a Difficult Experience	
3.2	Demonstrate ability to integrate one's response to a difficult experience, including acknowledgment of feelings of real or perceived guilt and discussion of medical errors. <ol style="list-style-type: none"> Acknowledge feelings of guilt, real or perceived, anger, sadness. Create a safe forum for discussion of medical errors and contributing factors. Understand and practice strategies for integration of these experiences.
Relevant milestones: PBLI1, PROF3, PROF4, ICS2	
Senior Resident Debriefings After Difficult Patient Care Experiences	

TABLE 2 Continued

	<p>3.3 Skillfully conduct a debriefing meeting (while understanding one’s own emotions) that analyzes the event, considers perceptions of family and members of the medical team, and asks critical questions to help the team members reach closure.</p> <p>a. Identify situations after which debriefing sessions would be beneficial.</p> <p>b. Recognize the need for support and debriefing in others.</p> <p>c. List components and benefits of a debriefing session.</p> <p>d. Conduct a successful mock debriefing session:</p> <ul style="list-style-type: none"> o Analyze the event. o Identify one’s own emotions. o Inquire about perceptions of family and medical team members. o Ask critical questions to help team members reach closure. o Comment on how medical team member responses may affect patient and family interactions. <p>Relevant milestones: ICS2, PROF4, SBP3</p> <p>The Physician’s Role When a Child Dies</p> <p>3.3 Describe the important steps to take after the death of a child, including saying goodbye to a patient; demonstrating good timing of future contact with the family, such as a follow-up meeting; attending a memorial service; or sending a note to the grieving family, in addition to initiating self-care.</p> <p>Relevant milestones: ICS1</p> <p>Part D: Introduction to Personal Wellness</p> <p>4.1 Define wellness and its importance for the practicing health care provider.</p> <p>4.2 Recognize how a health care provider’s response to grief and loss may impact others.</p> <p>4.3 Identify and gain insight into one’s own responses to grief and loss.</p> <p>4.4 Learn and integrate adaptive strategies:</p> <ul style="list-style-type: none"> a. Apply during stressful situations and after critical events, both in the moment and after the moment. b. Develop long-term strategies to maintain balance and resilience in the following domains: <ul style="list-style-type: none"> o Occupational o Emotional or cognitive o Relationship and community o Spirituality o Personal self-care <p>4.5 Develop an individualized wellness learning plan.</p> <p>Relevant milestones: PROF2, PROF4, PROF6, ICS2</p>
Milestone	Resilience in the Face of Grief and Loss Goals
ICS1	Part A, section 1.6
ICS2	Part A, sections 1.1, 1.2, 1.3, 1.4 Part B, sections 2.1, 2.2 Part C, sections 3.1, 3.2, 3.3, 3.4 Part D, sections 4.1, 4.2, 4.3, 4.4, 4.5
PBL1	Part C, sections 3.1, 3.2
PBL2	Part A, sections 1.1, 1.2, 1.3, 1.4
PROF1	Part A, sections 1.1, 1.2, 1.3, 1.5, 1.6 Part B, sections 2.1, 2.2
PROF2	Part A, section 1.5 Part D, sections 4.1, 4.2, 4.3, 4.4, 4.5
PROF3	Part A, section 1.6 Part C, sections 3.1, 3.2
PROF4	Part C, sections 3.1, 3.2, 3.3 Part D, sections 4.1, 4.2, 4.3, 4.4, 4.5
PROF6	Part B, sections 2.1, 2.2 Part D, sections 4.1, 4.2, 4.3, 4.4, 4.5
SBP3	Part C, section 3.3

ICS, Interpersonal and Communication Skills; PBL, Practice-Based Learning and Improvement; PROF, Professionalism; SBP, Systems-Based Practice.

find helpful, and appreciate the role their own perspectives and beliefs may play as they interact with patients and families. Both the FICA (Faith and belief, Importance, Community and Address in care)^{18,19}

and SPIRIT (Spiritual belief system, Integration with a spiritual community, Ritualized practices and restrictions, Implications for medical care and Terminal events planning) frameworks²⁰ are

reviewed as ways to effectively take a spiritual history. Case examples are provided to demonstrate the role that spirituality can play in helping a family make meaning of a child’s illness and to illustrate how spiritual humility can deepen the partnership between families and providers. A brief overview of world religions is included, and the important role of chaplains in working with patients and families is addressed.

Part B: Communicating With Families About Severe and Terminal Illness in Their Child

This section provides an in-depth module on guidance in preparing pediatric clinicians to lead effective and compassionate discussions regarding life-altering diagnoses, end-of-life care, medical errors, and the death of a patient. This part of the curriculum is built in a stepwise manner beginning with simple frameworks for disclosure, then exploration of attitudes of learners about loss and difficult conversations, and concluding with role play. The purpose of these discussions and frameworks is to increase learners’ comfort with the compassionate delivery of information balanced by skills in listening for the emotional reactions and needs of the family. Developing these skills requires mentoring, role play, and feedback in a safe setting.²¹ The learner’s guide and a PowerPoint presentation provide a comprehensive overview of the sequence of steps critical for effective disclosure of difficult medical information to families. The toolkit contains a set of narratives adapted from actual cases in both outpatient and critical care settings, accompanied by reflection exercises, embedded videos, and mindfulness practice exercises applicable to group discussions. An advanced communication skills learner guide offers practice in delivery of bad news through role-play scenarios. It provides details about how to run the sessions, including timeout

to allow discussion and dialogue. The final appendix section includes the Harvard Hospitals consensus statement on approaches to disclosing medical errors.

Part C: Managing Emotions After Difficult Patient Care Experiences

This portion of the curriculum moves the focus of the learners from the patient and family to managing the personal emotions of the health care professional. Part C assists in teaching within the Interpersonal Skills and Communication Competency, specifically to help achieve the milestone: "Communicate effectively with patients, families and the public across a broad range of socioeconomic and cultural backgrounds." Through multiple educational modalities, from discussion and reflection guides to cases and PowerPoint presentations, part C helps the health care professional learn how to behave and what to say in difficult circumstances. It includes modules on "Managing Emotions After Difficult Patient Experiences," "Integrating One's Emotions During These Experiences," "Strategies to Teach Senior Residents to Lead Debriefings," and "The Physician's Role When a Child Dies."

Part D: Introduction to Personal Wellness

This part continues to focus on the health care provider with an emphasis on defining wellness and its importance for the practitioner. Techniques to identify and reflect on one's own response to grief and loss and how that response might affect others are discussed. Through the learner's guide and PowerPoint presentation, learners are offered personal strategies to consider during and immediately after acute stressful events and in the long term, for maintenance of wellness and resilience. The strategies range from practical approaches to maintain balance at work (through occupational options,

approaches to life, emotional and cognitive interventions, improving relationships with others, spirituality, and self-care) to setting limits, practicing relaxation techniques, and promoting collegiality. Specific to resilience in the face of grief and loss, addressing the emotional impact of critical events through debriefing sessions, journaling, and reaching out to colleagues is suggested. The learner is reminded that it is important to be respectful of and to make time for personal relationships, spirituality and religious practices, and healthy life habits such as exercise and true vacations. The relationships between burnout, emotional intelligence, mindfulness, and wellness are explored. Clearly, 1 size does not fit all; each individual needs to identify and develop his or her own strategies. Therefore, development of an individualized wellness plan is described and encouraged.

IMPLEMENTATION OF THE CURRICULUM

As previously mentioned, the curriculum is deliberately flexible. Each module includes specific, measurable learning objectives that will enable faculty to conduct focused instruction and evaluation of learner progress. The curriculum is extensive, so selecting individual pieces for implementation at specific times of the year, in association with triggering events (such as death of a patient or provider error), or for certain levels of user might be most practical. Some potential opportunities for using this curriculum are as follows:

1. Medical students

- a. Medical students can have an especially difficult time processing critical events, such as unexpected outcomes, death of a patient, or medical errors. Part C of the curriculum can be inserted into the medical student

curriculum when appropriate, for example, during doctoring sessions.

- b. The Wellness Learning Plan in part D might be incorporated at the beginning of medical school and reviewed with the student's advisor or mentor quarterly.
- c. The wellness plan can be instituted during the pediatric clerkship and reviewed weekly or every other week with a faculty member.

2. Residents

- a. Residents also need support and guidance in navigating challenging patient care situations. This curriculum can be incorporated into a longitudinal residency curriculum lecture schedule. The benefit of this approach is that it can be revisited multiple times during residency.
- b. Specific modules could be used during high-intensity rotations such as oncology, neonatology, critical care, or emergency medicine.
- c. Small cohorts of residents could meet longitudinally with a faculty mentor or champion to review key components of the curriculum.
- d. The components of the curriculum could be presented at an annual residency retreat with different sections selected for each year of training. The residency retreat allows time for reflection that is sometimes difficult to arrange during the day-to-day academic year.
- e. "Training to be a senior resident" sessions or workshops could include the debriefing module (C.6, C.7, C.8) to teach the rising senior residents or fellows when, how, and why to lead a debriefing.
- f. The Wellness Learning Plan can augment the development

of already required individual learning plans. Each learner can create individual wellness goals, and the residency program can add wellness goals to the individual learning plan that is found in Pedialink or in specific institutional tracking mechanisms.

g. Role plays for residents to practice the disclosure of error and discussion of caring for oneself after an error is discovered could be incorporated into a patient safety curriculum.

3. Fellows: The curriculum can be a particularly useful tool during subspecialty fellowships in which trainees experience a high frequency of serious or terminal illness such as neonatology, critical care, oncology, child abuse, or emergency medicine.

a. Relevant parts can be included in seminars or workshops directed at teaching fellows how to be effective team leaders by developing techniques to help maintain team health and cohesion.

b. Engaging fellows in teaching this curriculum to residents can help fulfill teaching requirements and also provide a structured opportunity for supervising faculty to evaluate how well the fellow has mastered the subject matter and to critique teaching style and effectiveness.

c. The Wellness Learning Plan can be implemented by fellows for periodic review with their faculty advisor or mentor.

4. Practitioners

a. Because a child's death has become a rare occurrence, some practitioners may feel unprepared for working with a family with a terminally ill child through end-of-life care and bereavement. Using

the curriculum as a whole or selectively may be a critical informational resource and a tool for self-healing.

b. Practitioners may also benefit from having their own written wellness plan.

ACADEMIC FACULTY DEVELOPMENT

Various parts of this curriculum can be used for faculty development of a wide variety of skills such as improving communication skills, conducting a debriefing, increasing resilience, or maintaining personal wellness.

The greatest challenge to implementation of this curriculum is the lack of faculty experience in practicing or teaching some components of this curriculum. We have helped support interested but less experienced educators by providing instructor guides and annotated references in each module for use or modification as needed. If an interested faculty member is not available at a training program, learners can participate through self-study. As in any effort to implement a new curriculum, coordination, coaching, and support from an experienced champion facilitate success. It is also recommended that programs look globally at their preexisting curriculum to identify areas where these topics are already or most naturally covered as well as areas of greatest need.

Although this curriculum strives to be complete in addressing sources of grief and loss for pediatric providers and in identifying ways to bolster resilience, it does not attempt to cover some important aspects of clinical care, communication skills, and teamwork. For example, this is not a complete palliative care curriculum, and therefore it does not address issues such as medical management, creation of advance directives and goals of care, and

creation of a palliative care team. Similarly, we address medical error as a significant source of distress for medical professionals, but the curriculum does not outline the disclosure process, documentation requirements, or systematic approaches to error prevention and quality improvement. Also, this is not meant to be an exhaustive curriculum on wellness but, rather, to be adjunctive with a particular focus on resilience. Finally, many educational resources that intersect well with the curriculum already exist or will be developed, perhaps by users of this curriculum, in the future. The possibilities for modification, updating, and improvement are limitless. We plan a periodic systematic review every 2 to 3 years, but we welcome suggestions for improvement at any time.

We acknowledge that we have not provided an assessment of the curriculum. A thorough assessment would take ≥ 2 years to accomplish. Because of the urgency of the issues of addressing wellness and resiliency, we thought it was important to distribute this curriculum before the assessment. However, we have definite plans for assessment. A Pediatric Resident Burnout-Resilience Study Consortium has been formed that includes >30 pediatric residencies in the United States. This consortium is collecting baseline data from >1000 pediatric and medicine-pediatric residents through the APPD Longitudinal Educational Assessment Research Network study "Defining Key Factors in Burnout and Resilience in Pediatric Residents and the Relationship to Performance." The study uses multiple scales that include measures of personal health, perceived stress, resilience, and career satisfaction, the Epworth Sleepiness Scale, the Cognitive and Affective Mindfulness Scale, Neff's Self-Compassion Scale, the Maslach

Burnout Inventory, the Davis Empathy and Compassionate Care scales, selected Hatch Spirituality questions, and previous mind–body training. The current plan is that the Pediatric Resident Burnout–Resilience Study will implement the AAP resilience curriculum along with other interventions and systematically evaluate their effectiveness by using this panel of outcome measures in the participants.

CONCLUSIONS

The roles of pediatricians merge the intellectual and emotional aspects of patient care. Although the pediatrician's responsibilities and roles can be rewarding, they can also be challenging. This role demands self-reflection, including the ability to deal with change, empathize with patients and families, and accept fallibility. To maintain resilience, it is essential to have exposure to

strategies to recognize these risks and incorporate programmatic and individual strategies for wellness. The AAP Resilience in Grief and Loss Curriculum addresses the knowledge, attitudes, and skills needed to provide active and intentional ways to assist in developing and maintaining strategies that may increase cultural wellness in addition to personal wellness and resilience as health care professionals. We hope that others will find this curriculum useful.

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ABBREVIATIONS

AAP: American Academy of Pediatrics
APPD: Association of Pediatric Program Directors
COMSEP: Council on Medical Student Education in Pediatrics

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