

Supporting Advanced Practice Fellowship During COVID-19

MIRANDA OSBORNE,¹ MSN, RN-BC, CEN®, AMY RETTIG,² DNP, MALM, APRN-BC, AMY LINDSEY,² MS, APRN-CNS, PMHCNS-BC, KRIS MATHEY,² MS, APRN-CNP, AOCNP®, LORAINE SINNOTT,³ PhD, and DIANA McMAHON,² DNP, MSN, RN, OCN®

From ¹Memorial Hospital of Union County, Marysville, Ohio; ²The Arthur G. James Cancer Hospital & Richard J. Solove Research Institute, Columbus, Ohio; ³The Ohio State University Colleges of Optometry and Nursing, Columbus, Ohio

Authors' disclosures of conflicts of interest are found at the end of this article.

Correspondence to: Miranda Osborne, MSN, RN-BC, CEN®, 500 London Avenue, Marysville, OH 43040. E-mail: miranda.osborne@memorialohio.com

<https://doi.org/10.6004/jadpro.2022.13.8.8>

© 2022 Harborside™

Abstract

With the aging population and increasing number of cancer survivors contributing to a projected provider shortage, one solution is the specialization of nurse practitioners and physician assistants (part of the advanced practice provider [APP] workforce) in oncology. However, a lack of preparation in caring for the patient with cancer has led to burn-out and stress in these groups. The authors studied an APP fellowship program to describe resilience, stress, and compassion in a transition-to-practice program and explore the experience of intentional, facilitated conversations. During 2019 and 2020, 18 APP fellows at a large, academic comprehensive cancer center participated in this descriptive study. The fellowship started in-person but changed to a virtual setting due to the COVID-19 pandemic. Resilience was measured through the Connor Davidson Resilience Scale 10, the Perceived Stress Scale, and the Professional Quality of Life Scale at four points in time: baseline, 6 months, 12 months, and 18 months. The experience of intentional, facilitated conversations was captured through simple theme collection as part of a standard program evaluation. Resilience, perceived stress, and compassion showed no statistical significance over the course of the fellowship. Evaluations of an intentional, facilitated conversation program found focal areas that included challenges, fatigue, empathy, relationships, role, self-awareness, and self-care. Despite the challenges of the pandemic on the health-care provider, the retention rate of APPs remained steady during the fellowship. The findings from this study suggested there was a benefit in an oncology fellowship for advanced practice and that intentional, facilitated conversations provide reflection and support during this experience.

Preparing new graduates for nurse practitioner (NP) or physician assistant (PA) roles in oncology requires formal orientation and education for a successful transition (Alencar et al., 2018). Most graduate programs in the country prepare NPs and PAs, part of the advanced practice provider (APP) workforce, to be primary care providers, with minimal specialized training. As a

result, APPs may experience stress and burnout, specifically hopelessness and difficulty doing and being effective at work (Anandarajah et al., 2018; Stamm, 2010). One report found that “burnout and callousness is higher among APPs over physicians” (Anandarajah et al., 2018). Reduced job satisfaction may lead to chronic, job-related stress (Harris et al., 2018; Stamm, 2010). Burnout among APPs is associated with poor care quality, including low patient satisfaction, reduced safety, and disruptions in continuity of care from staff turnover (Edwards et al., 2018). The COVID-19 pandemic added complexity to the APP fellowship.

Job dissatisfaction and burnout can be mitigated with learned resilience, which is the ability to thrive in hardship (Rushton et al., 2015). APP fellowships offer skill development, role enculturation, and health-care system integration, which impacts resilience and retention (Alencar et al., 2018; Thomassen, 2018). The APP fellowship program at an academic comprehensive cancer center as described in this article provided dedicated time and space for reflective self-care through intentional, facilitated conversations in program called Claiming Resilience. These conversations focused on topics such as expectations, autonomy, relationships, and courage (Frankenfield et al., 2018).

METHOD

Resilience, stress, and compassion were explored in APP fellows during COVID-19 in a descriptive study approved by the cancer Institutional Review Board. Four timepoints (baseline, 6, 12, and 18 months) were assessed using the following validated tools: the Connor Davidson Resilience Scale 10 (CD-RISC-10; Campbell-Sills et al., 2009), the Perceived Stress Scale (PSS; Lee, 2012), and the Professional Quality of Life Scale (ProQOL; Stamm, 2010). After informed consent, an anonymous and voluntary online survey was emailed to participants. Study data were collected and managed using REDCap (Research Electronic Data Capture) tools, a secure, web-based software platform (Harris et al., 2009; Harris et al., 2019). Themes from the Claiming Resilience program were captured by a skilled mental health clinical nurse specialist as part of a routine program evaluation.

RESULTS

Resilience, Stress, Job Satisfaction

None of the tests were statistically significant at the 0.05 criterion level. Thus, there was no statistical evidence of change in resilience, stress, or satisfaction levels. Means and standard deviations were used to describe the central tendency and spread of the scores at each timepoint, as well as their change relative to baseline (Table 1). Change was computed by subtracting the baseline score from the 6-, 12-, or 18-month score. The nonparametric Wilcoxon signed-rank test was used to determine the statistical significance of within-person change. Testing was limited to 6 and 12 months change since the sample for 18-month change was only 4 or 5, depending on the survey (Table 2). Cohen's *d* was used to describe effect size. Cohen's *d* is the number of standard deviation units in a change. A commonly used rule of thumb rates a Cohen's *d* of 0.2 as small and 0.5 as medium. All analyses were performed using SAS version 9.4 for Windows.

Claiming Resilience Themes

Based on the thematic analysis of the session notes, the following themes were discovered: challenges, fatigue, role, empathy, self-awareness, and self-care (Figure 1).

“It can be scary and exciting.” One of the most frequent themes for the oncology APP participants was “challenges.” Concerns about the future, feeling self-conscious about abilities, uncertainty, and being on the front line of a pandemic were some of the challenges discussed in the sessions. The impact of COVID-19 was central to the experience; however, it did not eclipse the conversations. Interestingly, despite the consistent presence of new challenges, fatigue was not a major factor that was discussed.

“What part of the care is mine?” The theme of “role” emerged. Uncertainty about one's job was part of many of the sessions. The boundaries of the role were not always clear, especially early in the fellowship. Questions and discussion arose regarding how much they should know, expectations of other disciplines, fear of overstepping boundaries, and uncertainty about interventions. For those participants transitioning from registered nurse to APP, role clarity was necessary. There was a need

Table 1. Summary Statistics for Baseline, 6 Months, 12 Months, 18 Months, and Change Relative to Baseline

Outcome	Baseline				6 months				12 months				18 months				Change from baseline to 6 months				Change from baseline to 12 months				Change from baseline to 18 months			
	N	M	SSD		N	M	SSD		N	M	SSD		N	M	SSD		N	M	SSD		N	M	SSD		N	M	SSD	
Connor-Davidson: Higher means more resilience	14	28.4	4.4		12	30.2	4.4		7	30.4	6.1		5	29.0	6.6		12	1.3	2.9		7	0.4	3.9		5	0.8	4.2	
Perceived Stress Scale: Higher means more stress	14	14.7	4.8		12	16.8	4.6		7	14.9	6.1		4	14.8	2.6		12	1.8	4.7		7	0.3	5.8		4	-1.2	1.0	
Compassion Satisfaction: Higher means more satisfaction	14	39.9	5.4		12	39.9	5.0		7	39.4	5.2		4	35.3	4.4		12	-0.5	4.1		7	-2.1	3.2		4	-3.8	1.0	
Burnout: Higher means more burnout	14	20.3	4.8		12	20.6	4.6		7	20.7	5.2		4	22.5	6.2		12	0.2	3.6		7	1.1	1.9		4	1.0	3.5	
Secondary Traumatic Stress: Higher means more stress	14	21.3	6.4		12	21.3	4.2		7	22.3	7.9		4	20.0	6.8		12	-0.6	5.7		7	1.6	6.6		4	-0.5	2.1	

Note. Change was computed by subtracting the earlier from the later timepoint. M = mean; SSD = sample standard deviation.

Table 2. Assessment of Change Relative to Baseline

Outcome	Time 1	Time 2	Sample size	Time 1		Time 2		Change		p value	Effect size ^b
				Mean	SD	Mean	SD	Mean ^a	SD		
Connor-Davidson: Higher means more resilience	Baseline	6 mo	12	28.9	4.3	30.2	4.4	1.3 (-0.6-3.1)		0.15	0.29
	Baseline	12 mo	7	30.0	4.3	30.4	6.1	0.4 (-3.1-4)		0.69	0.08
Perceived Stress Scale: Higher means more stress	Baseline	6 mo	12	15.0	5.0	16.8	4.6	1.8 (-1.2-4.7)		0.27	0.36
	Baseline	12 mo	7	14.6	5.4	14.9	6.1	0.3 (-5-5.6)		0.81	0.05
Compassion Satisfaction: Higher means more satisfaction	Baseline	6 mo	12	40.4	5.7	39.9	5.0	-0.5 (-3.1-2.1)		0.83	0.10
	Baseline	12 mo	7	41.6	5.6	39.4	5.2	-2.1 (-5.1-0.8)		0.06	0.40
Burnout: Higher means more burnout	Baseline	6 mo	12	20.4	5.2	20.6	4.6	0.2 (-2.1-2.4)		0.71	0.04
	Baseline	12 mo	7	19.6	6.1	20.7	5.2	1.1 (-0.6-2.9)		0.19	0.20
Secondary Traumatic Stress: Higher means more stress	Baseline	6 mo	12	21.8	6.7	21.3	4.2	-0.6 (-4.2-3)		0.54	0.10
	Baseline	12 mo	7	20.7	7.7	22.3	7.9	1.6 (-4.5-7.7)		0.31	0.20

Note. The p values are for Wilcoxon signed-rank tests of the hypothesis of no change relative to baseline.

^a95% CI for the true difference.

^bCohen's d.

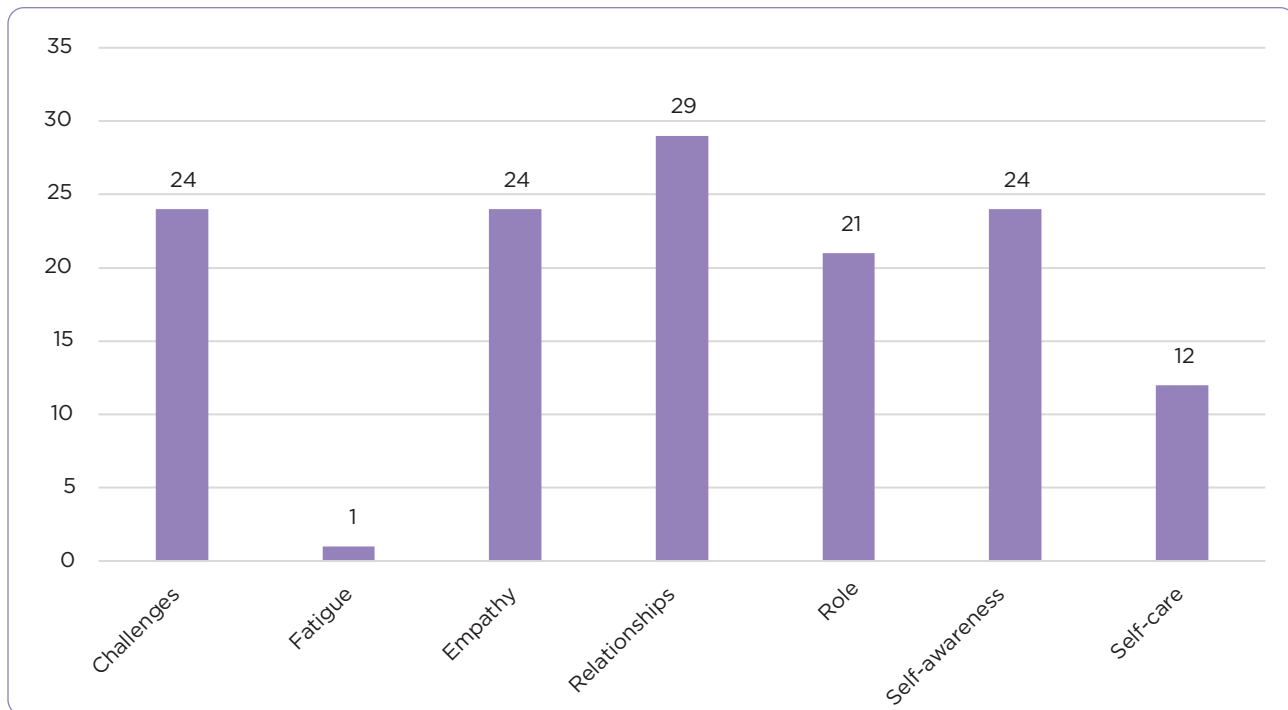


Figure 1. Themes from Claiming Resilience.

to understand and broker the differences between working at the bedside and being an APP.

“I want to offer more support, understanding, and time.” As the year progressed, empathy became a more frequent topic. The intricacies of patient care were at the center of the concerns. More nuanced conversations regarding end of life, ethics, and therapeutic interactions with patients and families were occurring. Added to that were the complex operational situations that COVID-19 introduced to these challenging patient encounters.

“The culture of a team can impact job satisfaction significantly.” Relationships proved the most common theme of all the sessions. Peer support was identified regularly as important to their satisfaction. The universality of the experience between fellows offered reassurance as evidenced by frequent statements of “Not alone” and “It is nice to know we are all in the same boat.” Clear communication and support from preceptors were often shared as a positive benefit of the fellowship experience.

“Transition is hard.” Self-awareness was demonstrated in each of the sessions with the same frequency of empathy and challenges. The group identified how they were impacted by the challenges of the fellowship. They often shared mis-

takes and what was learned. They were able to identify their emotions around their experiences and were willing to discuss them with peers. Without self-reflection and awareness, this would be difficult.

“Trust the process.” The theme of self-care was discussed a few months into the COVID-19 pandemic. The stress experienced by new providers on the front lines of health care was evident. They shared stress reduction techniques, such as walking pets, spending time outside, and practicing gratitude.

DISCUSSION

This project occurred during the COVID-19 pandemic and provided a unique view of resiliency, stress, and compassion of APPs in an oncology fellowship. Resilience, stress, and job satisfaction results showed sustained scores by fellows over time from the CD-RISC-10, PSS, and ProQOL. The significant and negative impact of the COVID-19 pandemic on the well-being of communities and health-care providers worldwide has been reported by others (Marshall et al., 2022; Rogers et al., 2022; Thomaier et al., 2020).

One consideration for the difference in results from this study to other studies during the

COVID-19 pandemic is system support. Health system support during the COVID-19 pandemic was repeatedly encouraged (Dewey et al., 2020; Harris et al., 2020; Hlubocky et al., 2021; Holtz et al., 2018; Klein et al., 2021; Shanafelt et al., 2020). This study provided a look at system support for new APPs in the oncology specialty through a year-long fellowship, as well as intentionally including opportunity for reflection during transition to practice. Maintaining time for intentional, facilitated conversations was uninterrupted despite the unexpected arrival of a pandemic. The collection of program evaluation data by a skilled mental health clinical nurse specialist provided additional insight into the value of facilitated conversations during early career development. Professional role and boundaries, interdisciplinary relationships, and setting limits were common challenges early in the APP's role transition. As they gained more experience, a focus on patient care, empathy, and therapeutic relationships emerged. Finally, the theme of self-care emerged, suggesting that self-care may be an afterthought to clinical competence instead of a mechanism to enhance clinical competence.

Future research of resilience, stress, and job satisfaction in APPs, as well as other health-care workers, is warranted and perhaps necessary now and moving forward. Methods to engage novice APPs in stress reduction activities is critical as role definition and expectations continue to evolve in this professional role. Understanding the most engaging and effective interventions to enhance resilience (including health-care system support) as APPs transition to a new professional role is crucial for the well-being of the clinician, which impacts the quality of patient care (Edwards et al., 2018). Additionally, identifying resilience sustainment activities may provide health-care providers with tools to support role challenges while prioritizing clinical skills.

CONCLUSION

Resilience is essential in mitigating burnout, stress, and compassion fatigue. The current shortage of health-care providers, in addition to the pandemic creating challenges that burden care providers, has created a significant need for resiliency. Organizations should place a high priority on developing resilience in our new care providers. The current study has demonstrated that providing formal oncology

transition-to-practice programs for APPs with an avenue for intentional, facilitated conversations provides resilience support, enhancing the ability to build a network of peer support and self-care. ●

Disclosure

This project received funding through the Arthur G. James Cancer Hospital & Richard J. Solove Research Institute Innovation and Research Council and The Ohio State University Center for Clinical and Translational Science grant support (National Center for Advancing Translational Sciences, Grant UL1TR002733).

References

- Alencar, M. C., Butler, E., MacIntyre, J., & Wempe, E. P. (2018). Nurse practitioner fellowship: Developing a program to address gaps in practice. *Clinical Journal of Oncology Nursing*, 22(2), 142-145. <https://doi.org/10.1188/18.CJON.142-145>
- Anandarajah, A. P., Quill, T. E., & Privitera, M. R. (2018). Adopting the quadruple aim: The University of Rochester Medical Center Experience: Moving from physician burnout to physician resilience. *American Journal of Medicine*, 131(8), 979-986. <https://doi.org/10.1016/j.amjmed.2018.04.034>
- Campbell-Sills, L., Forde, D. R., & Stein, M. B. (2009). Demographic and childhood environmental predictors of resilience in a community sample. *Journal of Psychiatric Research*, 43(12), 1007-1012. <https://doi.org/10.1016/j.jpsychires.2009.01.013>
- Dewey, C., Hingle, S., Goelz, E., & Linzer, M. (2020). Supporting clinicians during the COVID-19 pandemic. *Annals of Internal Medicine*, 172(11), 752-753. <https://doi.org/10.7326/M20-1033>
- Edwards, S. T., Marino, M., Balasubramanian, B. A., Solberg, L. I., Valenzuela, S., Springer, R.,...Cohen, D. J. (2018). Burnout among physicians, advanced practice clinicians and staff in smaller primary care practices. *Journal of General Internal Medicine*, 33(12), 2138-2146. <https://doi.org/10.1007/s11606-018-4679-0>
- Frankenfield, R., Thompson, K., Lindsey, A., & Rettig, A. (2018). Caring for staff: The role of psychiatric mental health advanced practice RNs in supporting oncology nurses. *Clinical Journal of Oncology Nursing*, 22(5), 569-572. <https://doi.org/10.1188/18.CJON.569-572>
- Harris, D. A., Haskell, J., Cooper, E., Crouse, N., & Gardner, R. (2018). Estimating the association between burnout and electronic health record-related stress among advanced practice registered nurses. *Applied Nursing Research*, 43, 36-41. <https://doi.org/10.1016/j.apnr.2018.06.014>
- Harris, M. D., Williams, L. M., & Duke, R. (2020). The millennial engagement, resiliency and retention study: What does your millennial advanced practice registered nurse workforce really want? *Journal of the American Association of Nurse Practitioners*, 33(11), 924-930. <https://doi.org/10.1097/JXX.0000000000000535>
- Harris, P. A., Taylor, R., Minor, B. L., Elliott, V., Fernandez, M., O'Neal, L.,...REDCap Consortium (2019). The REDCap consortium: Building an international commu-

- nity of software platform partners. *Journal of Biomedical Informatics*, 95, 103208. <https://doi.org/10.1016/j.jbi.2019.103208>
- Harris, P. A., Taylor, R., Thielke, R., Payne, J., Gonzalez, N., & Conde, J. G. (2009). Research electronic data capture (REDCap)—a metadata-driven methodology and workflow process for providing translational research informatics support. *Journal of Biomedical Informatics*, 42(2), 377–381. <https://doi.org/10.1016/j.jbi.2008.08.010>
- Hlubocky, F. J., Symington, B. E., McFarland, D. C., Gallagher, C. M., Dragnev, K. H., Burke, J. M.,...Shanafelt, T. D. (2021). Impact of the COVID-19 pandemic on oncologist burnout, emotional well-being, and moral distress: Considerations for the cancer organization's response for readiness, mitigation, and resilience. *JCO Oncology Practice*, 17(7), 365–374. <https://doi.org/10.1200/OP.20.00937>
- Holtz, H., Heinze, K., & Rushton, C. (2018). Interprofessionals' definitions of moral resilience. *Journal of Clinical Nursing*, 27(3–4), e488–e494. <https://doi.org/10.1111/jocn.13989>
- Klein, C. J., Weinzimmer, L. G., Dalstrom, M., Lizer, S., Cooling, M., & Pierce, L. (2021). Investigating practice-level and individual factors of advanced practice registered nurses and physician assistants and their relationship to resilience. *Journal of the American Association of Nurse Practitioners*, 34(2), 310–321. <https://doi.org/10.1097/JXX.0000000000000639>
- Lee, E. H. (2012). Review of the psychometric evidence of the perceived stress scale. *Asian Nursing Research*, 6(4), 121–127. <https://doi.org/10.1016/j.anr.2012.08.004>
- Marshall, V. K., Mason, T. M., Chavez, M., Martinez-Tyson, D., & Bugajski, A. (2022). Impact of COVID-19 on oncology healthcare providers: The resilience of a profession. *Cancer Nursing*, 45(2), E407–E416. <https://doi.org/10.1097/NCC.0000000000000954>
- Rogers, M., Lamarche, K., Miller, M., Moore, K. S., Spies, L. A., Taylor, J., & Staempfli, S. (2022). Global emotional and spiritual well-being and resilience of advanced practice nurses during the COVID-19 pandemic: A cross-sectional study. *Journal of Advanced Nursing*, 78(5), 1483–1492. <https://doi.org/10.1111/jan.15161>
- Rushton, C. H., Batcheller, J., Schroeder, K., & Donohue, P. (2015). Burnout and resilience among nurses practicing in high-intensity settings. *American Journal of Critical Care*, 24(5), 412–420. <https://doi.org/10.4037/ajcc2015291>
- Shanafelt, T., Ripp, J., & Trockel, M. (2020). Understanding and addressing sources of anxiety among health care professionals during the COVID-19 pandemic. *JAMA*, 323(21), 2133–2134. <https://doi.org/10.1001/jama.2020.5893>
- Stamm, B. H. (2010). The Concise ProQOL Manual: The concise manual for the Professional Quality of Life Scale (2nd ed.). Pocatello, ID: ProQOL.org.
- Thomaier, L., Teoh, D., Jewett, P., Beckwith, H., Parsons, H., Yuan, J.,...Vogel, R. I. (2020). Emotional health concerns of oncology physicians in the United States: Fallout during the COVID-19 pandemic. *PloS One*, 15(11), e0242767. <https://doi.org/10.1371/journal.pone.0242767>
- Thomassen, A. (2018). Fellowship programs: Reflections of an advanced practice nurse fellow. *Clinical Journal of Oncology Nursing*, 22(4), 383–385. <https://doi.org/10.1188/18.CJON.383-385>