

**A focus on the perceived value of preceptor support by pharmacy residents and fellows  
during the COVID-19 pandemic**

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We reviewed with interest the comments of Hanson and colleagues regarding our cross-sectional survey of pharmacy residents and fellows to assess the impact of the coronavirus disease 2019 (COVID-19) pandemic on their training experience.<sup>1</sup> We agree that the subjective experiences of postgraduate year 1 (PGY1) and postgraduate year 2 (PGY2) pharmacy residents and fellows differ based on their respective circumstances and time spent in training. As a result, the COVID-19 pandemic may have affected trainees at different levels in distinct ways. We accounted for this, however, in a subanalysis that stratified responses based on trainee position and year (Table 1). We found no significant difference between trainees at different levels, including in the amount of time spent with preceptors, with a reported 50% median decrease from before to during the pandemic. Because of the similarity of these responses, we chose not to perform distinct thematic analyses based on training level. We instead evaluated all respondents together and found that fewer direct patient care opportunities (32%), less communication with teams (29%), and less time spent with preceptors (27%) were associated with a perceived worsening of training experiences. Of these factors, only increased time spent with preceptors was identified as protective against a worsened experience in a multivariable logistic regression analysis (odds ratio [OR], 0.83; 95% confidence interval [CI], 0.74-0.92). We constructed an additional multivariable model including current position and hours spent with preceptors in which this effect was retained (OR, 0.91; 95% CI, 0.84-0.99).

We recognize that PGY1 residents, PGY2 residents, and fellows have wide-ranging personal and professional needs due to the individualized nature of the programs and trainees. Some residents and fellows may have preferred greater autonomy, particularly as

they neared the end of their training experience; however, increased independence was reported to contribute to a perceived improvement in only 10% of respondents. It is also worth highlighting the limitation that perceived worsening is subjective and unique to the perception of the respondent; however, this was accounted for by matching responses before and during the pandemic, allowing respondents to serve as their own control.

We acknowledged the limitation that our survey's intent did not include responses from program directors or preceptors, as our aim was to describe the changes that trainees experienced before and during the pandemic. The survey particularly functioned to identify any differences among trainees across varying geographic locations, high-incidence areas, and institution acuties. Regarding transparency from program leadership about pandemic-related changes, 76% of respondents reported that discussions occurred to inform trainees of potential disruptions. We agree that the personal challenges and experiences of program leadership and preceptors may have affected how trainees perceived the difficulties of the COVID-19 pandemic and could have influenced the trajectory of changes made to programs due to the pandemic. It is our hope that our study reinforces the quintessential role open communication plays in the relationship between program leadership, preceptors, and trainees. During a future pandemic, the results of our survey may serve as a reminder to pharmacy training programs to remain cognizant of maintaining preceptor support as much as possible to foster a quality experience for trainees. We also hope that future studies will assess the perspectives of program directors and preceptors to note shifts caused by the pandemic, including their approach to teaching residents and fellows.

Our study highlights shared concerns and experiences of pharmacy residents and fellows related to their training experience following the emergence of COVID-19. Resident

and fellow responses demonstrate that preceptors have a major impact on the subjective experience of trainees. As a result, preceptors' time should be equally preserved and respected by institutions and regulatory bodies. While we recognize that increased autonomy, and thus diminished time spent with preceptors, is a crucial aspect of developing independence as a pharmacist, our study suggests that there is an inflection point where undue independence may hamper the training experience, especially during a pandemic. Additionally, while trainees should be able to practice with a high degree of independence at the end of their training, there is still value in adequate time spent with preceptors to provide feedback, discuss challenges, and support professional growth. These findings provide program directors and preceptors with insight about what residents and fellows value in their training experiences. We hope that these factors will be maintained and prioritized by residency and fellowship regulatory organizations in the face of future disturbances.

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## References

1. Moore WJ, Webb A, Morrisette T, et al. Impact of COVID-19 pandemic on training of pharmacy residents and fellows: results from a national survey of postgraduate pharmacy trainees. *Am J Health-Syst Pharm.* 2021;78(12):1104-1111.

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**Table 1.** Responses Stratified by PGY1 Residents, PGY2 Residents, and Fellows

Characteristic <sup>a</sup>	Before COVID-19 Pandemic			During COVID-19 Pandemic		
	Fellows ( <i>n</i> = 30)	PGY1 Residents ( <i>n</i> = 277)	PGY2 Residents ( <i>n</i> = 203)	Fellows ( <i>n</i> = 30)	PGY1 Residents ( <i>n</i> = 277)	PGY2 Residents ( <i>n</i> = 203)
Daily time with preceptor, hours	2.00 (1.00, 4.00)	4.00 (3.00, 6.00)	4.00 (2.00, 5.00)	0.50 (0.00, 1.00)	2.00 (2.00, 4.00)	2.00 (1.00, 4.00)

Abbreviations: COVID-19, coronavirus disease 2019; PGY1, postgraduate year 1; PGY2, postgraduate year 2.

<sup>a</sup>Data are median (interquartile range).

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