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11 **Pain Fellows Survey: COVID-19 Impact on the Training and Job Market**
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23 No funding sources to disclose
24 No conflict of interest to declare
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3 Although pandemics and natural disasters have had economic repercussions, none have arguably had as
4 much effect on the physician job market as COVID-19. News outlets across the nation reported on thousands of
5 healthcare workers abruptly finding themselves out of work, and billions of dollars in lost revenue within the
6 medical field across the world. According to the United States Bureau of Labor Statistics, pandemic-related job
7 losses in the healthcare sector were second only to those in the restaurant industry.
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12 Across the board, physicians have been seeing less patients. Procedural-based subspecialties like
13 interventional spine and pain management have resultantly seen a drop in overall cases performed in the office,
14 ambulatory surgery, and hospital. This as a response to both the quarantine as well as the need to shift resources to
15 emergency and acute hospital services. Medical practices, both within the academic, private and group settings, have
16 responded by reduced hours and staffing, and in more dramatic cases furloughs and layoffs of physicians. This
17 dramatic change was unforeseeable and unprecedented.
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22 The pandemic has further reaching effects beyond those currently in practice. While medical editorials and
23 publications have addressed both best practices and physician burnout amidst the pandemic, the conversation must
24 now turn towards those most financially and educationally vulnerable – our colleagues that are presently in
25 fellowship [1-2]. Earlier in the pandemic, Hagedorn et al addressed the impact of COVID-19 on pain medicine
26 fellowship training, and pointed to the importance of remote learning to make up for lack of in-person and hands-on
27 experience [3]. At that time, both clinical duties and interventional procedures were limited in training programs. In
28 a two-part series Kohan et al, elaborated on the impact that COVID-19 has had on pain fellowship education and
29 fellows' well-being [4,5].
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34 Interventional spine and pain fellows preparing for transition to real-world practice are doing so at an
35 unprecedented time in history. This is a particular pressing issue as fellows finish their last few months of training
36 and actively explore the job market. Normally a time of excitement and celebration, long-time trainees are typically
37 able to reap the benefits of their years of hard work. Now over one year into the pandemic, to the chagrin of most
38 fellows, the job market is more challenging and stressful. In addition, those who entered the job market in 2020 may
39 have been less prepared than any class in recent times because of the abbreviated training year.
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44 To examine the experience further, we sent out an eleven-question survey electronically to various
45 fellowship programs in the United States (Table 1). Sixty (60) survey results were collected anonymously, made up
46 of Anesthesiology (32), Physical Medicine & Rehabilitation (23), Neurology (2) and other (3) subspecialties. The
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3 survey asks questions regarding the adequacy of the fellowship training. An overwhelming majority of those
4 surveyed (44) of those surveyed answered either “yes” or “somewhat” to the question of whether they felt that their
5 educational training had been negatively affected by COVID-19 (Figure 1). Despite this relatively high amount, all
6 those surveyed reported feeling confident moving forward into the work-field. Part of the reason for this may be that
7 majority of those surveyed (55/60) had participated in additional training – which previous publications have
8 emphasized – mainly by way of educational webinars (54), industry-sponsored webinars (39), cadaver labs (33),
9 journal clubs (32) and societal involvement (12). Fifty-four of the 55 that had use additional educational resources
10 reported benefit to their overall education.
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18 At the time of the survey, not all respondents were applying for jobs. For those that had (41), we asked
19 them to grade the difficulty of navigating the present job market. Responses were 5 extremely difficult, 14 difficult,
20 17 neutral, 5 easy, and 0 extremely easy (Figure 2). To include all of those surveyed, a final question “What is your
21 present outlook on the Interventional/Pain Management job market?” was asked. Seven respondents reported
22 excellent, 21 good, 19 neutral, 7 fair, 6 poor (Figure 3).
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28 It is important to keep in mind that this survey is a reflection of fellows’ attitudes at one of the most
29 challenging times in the history of modern medicine. Implications of the results of the survey show that while the
30 perception of the present job market is neutral-to-poor, the overall outlook for the field of pain management remains
31 optimistic. The same can be said about the reported feeling confidence in transitioning to real-world practice. One
32 possible rationale for this is the timing of the survey, as nationwide COVID-19 infection numbers have decreased
33 exponentially. The job market will understandably take a bit longer to recuperate but there is at least more optimism
34 now than was present a few months ago.
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41 Admittedly, the greatest limitation of this survey is that it has no frame-of-reference. It would be interesting
42 to see if there is a dramatic shift of perceived difficulty in finding jobs, as well as perception of the pain job market,
43 moving forward. As more people are vaccinated and infection rates continue to decline, the interventional pain field
44 should recover and regain stability as with the rest of the economy. For now, it is imperative that the interventional
45 and pain medicine community to not only recognize the struggles that our young colleagues are going through, but
46 also to continue to improve resources that may better assist them. In addition, the pain medicine leadership should
47 consider creating plans to better adapt to the next emergency that impacts large geographies of training. This may
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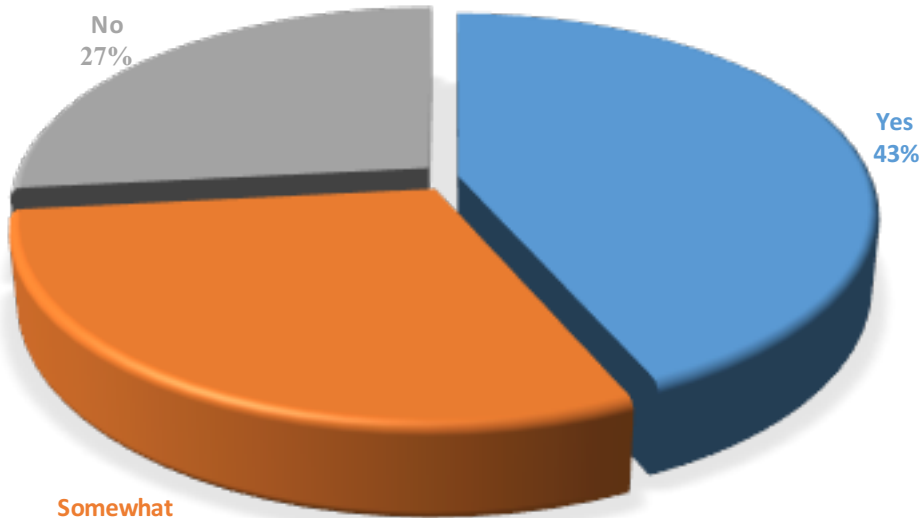
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3 include adjustments in training schedules, creation of practice development skills, and networking to better identify
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5 areas of opportunity in difficult times.
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Survey Questions & Results	
I. Gender	
<i>Male</i>	35
<i>Female</i>	22
<i>Unanswered</i>	3
II. Specialty	
<i>Anesthesiology</i>	32
<i>PM&R</i>	23
<i>Neurology</i>	2
<i>Other</i>	3
III. Practice Location	
<i>Northwest</i>	9
<i>Northeast</i>	15
<i>Midwest</i>	6
<i>South</i>	9
<i>Southwest</i>	10
<i>Southeast</i>	10
<i>Unanswered</i>	1
IV. Do you feel that your educational training in the past year has been negatively affected by COVID-19?	
<i>Yes</i>	26
<i>Somewhat</i>	18
<i>No</i>	16
V. Do you feel confident moving forward into the work-field with the education that you have had in the past year?	
<i>Yes</i>	46
<i>Somewhat</i>	14
<i>No</i>	0
VI. Have you taken part in any additional training in the past year?	
<i>Yes</i>	55
<i>No</i>	5
VII. If so, what type? (select all that apply)	
<i>Educational webinars</i>	54
<i>Industry Sponsored Events</i>	39
<i>Cadaver Labs</i>	33
<i>Journal Clubs</i>	32
<i>Societal Work</i>	12
<i>None</i>	2
<i>Other</i>	2
VIII. Do you believe it has been beneficial to your overall training?	
<i>Yes</i>	54
<i>No</i>	1
IX. Are you applying for a job this year?	
<i>Yes</i>	41
<i>No</i>	19
X. If so, how difficult has it been to find a position?	
<i>Extremely difficult</i>	5
<i>Difficult</i>	14
<i>Neutral</i>	17
<i>Easy</i>	5
<i>Very Easy</i>	0
<i>Not Applicable</i>	19
XI. What is your present outlook on the Interventional/Pain Management Job Market?	
<i>Excellent</i>	7
<i>Good</i>	21
<i>Neutral</i>	19
<i>Fair</i>	7
<i>Poor</i>	6

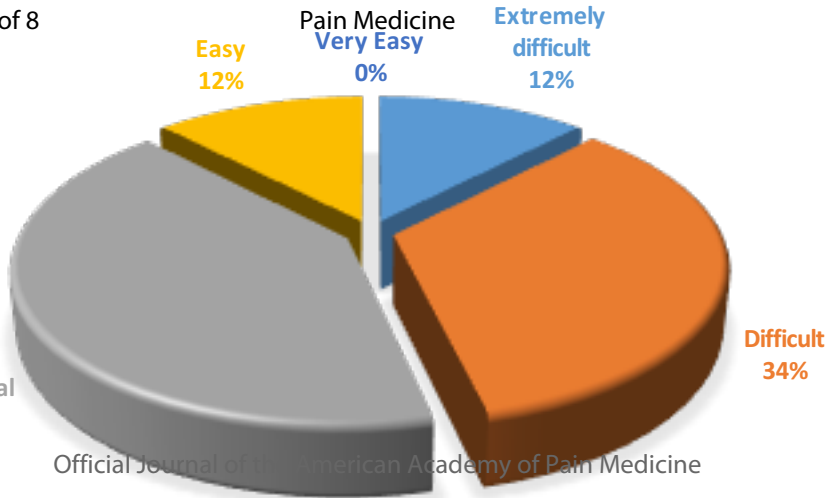
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Official Journal of the American Academy of Pain Medicine

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