Assessment of the 2020 COVID-19 Pandemic Impact on the United States Neonatologist Workforce

BACKGROUND

- Careers in medicine have traditionally been dichotomized into academic or private practice venues, but over time, career identities have become more fluid.
- The COVID-19 pandemic has profoundly challenged the United States healthcare workforce across the domains of clinical care, academic endeavors, and quality of life.

OBJECTIVE

• We sought to describe how the COVID-19 pandemic affected professional and personal lives in a national sample of United States neonatologists.

METHODS

- The American Academy of Pediatrics conducted a voluntary anonymous survey of all boardcertified and eligible United States neonatologists from July to November 2021, and received 2113 responses (30% response rate).
- The survey included questions about professional duties, the effects of COVID-19, and social factors.
- We report from a subset of 1,490 active neonatologists who responded to the questions about COVID-19.
- Statistical analysis, including t-test of means, was performed using JMP 16.1.0 by SAS (Cary, NC).

American Academy of Pediatrics



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 Academically appointed v. non-appointed neonatologists reported COVID contributed to : • Fewer hours of working on site (48% v. 18%), but • Working more hours overall (24% v. 18%)

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The COVID-19 pandemic disrupted neonatologists professionally and personally

• Overall:

 69% of all neonatologists reported changes their workflow/workday/income 20% of all neonatologists related career impacts 69% of researchers suffered delays or setbacks in their projects

• Work-life integration:

• Over 50% spent more time with family, but • 31% reported increased stress with partner 22% reported eldercare concerns 18% reported childcare concerns

Table 1: Respondent Characteristics

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District X 152 (11%)	District IX	150 (11%)
	District X	152 (11%)

Table 2: Professional Activity Across Career Types

		Overall	No Appointment	Academic Appointment	n value
		n = 1490	n = 482	n = 1008	p-value
	No change	465 (31%)	211 (44%)	254 (25%)	< 0.001
<da'< td=""><td>Less time on site</td><td>567 (38%)</td><td>85 (18%)</td><td>482 (48%)</td><td>< 0.001</td></da'<>	Less time on site	567 (38%)	85 (18%)	482 (48%)	< 0.001
Vorl	More time on site	152 (10%)	48 (10%)	104 (10%)	NS
N NC	Fewer patients	132 (9%)	48 (10%)	84 (8%)	NS
ict o	More patients	117 (8%)	47 (10%)	70 (7%)	NS
bgm	Fewer work hours	63 (4%)	24 (5%)	39 (4%)	NS
11 61	More work hours	332 (22%)	87 (18%)	245 (24%)	0.005
D 1	Reduced compensation	413 (28%)	142 (29%)	271 (27%)	NS
70	Increased compensation	13 (1%)	3 (1%)	10 (1%)	NS
0	Other	108 (7%)	30 (6%)	78 (8%)	NS
	Respondents conducting research	810 (54%)	143 (27%)	667 (65%)	<0.001
-C	Research impacted	559 (69%)	23 (19%)	56 (9%)	0.024
arcl	Lab shut down	81 (10%)	7 (6%)	74 (12%)	0.017
lese	Grants affected	63 (8%)	2 (2%)	61 (10%)	< 0.001
on R	Clinical Study shut down	187 (24%)	13 (10%)	174 (27%)	< 0.001
act c	Unable to complete a project	193 (25%)	19 (15%)	174 (27%)	0.002
bgm	Had to restart a project	52 (7%)	5 (4%)	47 (7%)	NS
COVID 19 Ir	Team members unable to continue	144 (19%)	19 (15%)	125 (19%)	NS
	Planned grant missed	76 (10%)	3 (2%)	73 (11%)	< 0.001
	Paper significantly delayed	231 (30%)	21 (17%)	210 (33%)	<0.001
	Tenure jeopardized	19 (2%)	1 (1%)	18 (3%)	NS
	Other	79 (10%)	23 (19%)	199 (31%)	0.008

Table 3: Professional Time and Compensation Across Career Types

		Overall	No Appointment	Academic Appointment	n valua
		n = 1490	n = 482	n = 1008	p-value
9 Impact on areer	Retired earlier	7 (0%)	2 (0%)	5 (1%)	NS
	Stayed longer	60 (4%)	18 (4%)	42 (4%)	NS
	Changed jobs	61 (4%)	17 (4%)	44 (4%)	NS
	Temporarily left	30 (2%)	13 (3%)	17 (2%)	NS
D 1 C	Fewer opportunities for promotion	97 (7%)	21 (4%)	76 (8%)	0.011
	Other	89 (6%)	31 (6%)	58 (6%)	NS
0	No change	1185 (80%)	390 (82%)	795 (80%)	NS
	More time with Family	713 (51%)	214 (48%)	499 (53%)	NS
E a	Less time with Family	254 (18%)	90 (20%)	164 (17%)	NS
ct o nce	Childcare Struggle	254 (18%)	90 (20%)	164 (17%)	NS
npa Bala	Eldercare Struggle	303 (22%)	78 (17%)	225 (24%)	0.004
COVID 19 In Work-Life I	Increased Stress with Significant Other	429 (31%)	143 (32%)	286 (30%)	NS
	Decreased stress with Significant Other	78 (6%)	19 (4%)	59 (6%)	NS
	Self quarantine	146 (11%)	42 (9%)	104 (11%)	NS
	More Teaching Children	225 (16%)	70 (16%)	155 (17%)	NS
	Other	176 (13%)	65 (15%)	111 (12%)	NS

This pandemic exposed the need for flexible and resilient systems that will support neonatologists to provide their best care and will protect their scientific missions.