Parental health in fellowship trainees: Fellows’ satisfaction with current policies and interest in innovation

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Abstract

Background: Parenthood during medical training is common and impacts trainee well-being. However, current graduate medical education parental health policies are often limited in scope. We explored current fellowship trainees’ knowledge of/satisfaction with current policies as well as interest in potential changes/additions to existing policies.

Methods: Fellowship program directors/coordinators at a three-site academic institution were surveyed and information was collected from 2015 to 2019 regarding fellow demographics and parental health policies. We distributed an electronic survey to fellows containing Likert-type-scale questions rating knowledge/level of satisfaction with current parental health policies and interest in potential additions/modifications to current policies.

Results: Thirty-five of 47 (74%) fellowship programs responded. An average of 11% of female fellows and 15% of male fellows took parental leave during the study period. Three (9%) of the programs had at least one additional parental health policy beyond institutional graduate medical education policies. In the fellow survey, 175 of 609 fellows responded (28.7%), of which 84 (48.6%) were female. Although 89.1% agreed/strongly agreed that parental health is an important part of health and well-being for fellows, only 32% were satisfied/very satisfied with current policies (no significant sex-related differences). Fellows reported the following potential interventions as important/very important: 79.2% increased (paid) maternity leave (72.7% male, 86.7% female, \( p = 0.02 \)), 78% increased (paid) paternity leave (76.4% male, 81.9% female, \( p = 0.37 \)), 72.3% part-time return to work (60.2% male, 84.3% female, \( p = 0.0005 \)), 63% coverage for workup/management of infertility (52.3% male, 74.7% female, \( p = 0.002 \)), and 79.9% on-site day care (70.7% male, 89.2% female, \( p = 0.003 \)).

Conclusions: Parental health includes multiple domains, not all of which are covered by current policies. Fellows feel that parental health is an important part of overall health and well-being, but most are not satisfied with current policies. Expanded access to parental leave and new policies (part-time return to work, infertility management, and on-site day care) are opportunities for innovation.

Keywords

breastfeeding, childcare, fertility, medical education, parental health

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**Introduction**

Up to half of medical trainees report having their first child during training. However, research has demonstrated that pregnant physicians are not only at an increased risk of pregnancy-related complications, but also experience negative workplace attitudes including anger, resentment, and lack of support. It has also been reported that female physicians of childbearing age are felt (by those in a position to hire them) to represent a “hiring risk,” and female trainees report concern that having children will negatively impact their careers partly due to negative perception by other physicians. Policies for both childbearing leave (afforded for recovery of a woman that gave birth) as well as parental/family leave (taken by a woman who gave birth after childbirth is complete, taken by a man who recently became a father, or taken by non-birth parents to care for a new baby) differ significantly among academic institutions, with average length of leave policies failing to meet recommendations set by the American Academy of Pediatrics. While literature regarding return to work after maternity leave is more scarce, a study at one institution found that female internal medicine residents returning to work after pregnancy received lower peer evaluation scores (after pregnancy) compared to their male colleagues.

While the literature regarding pregnancy and parental leave has predominantly included residents and not subspecialty fellows, pregnancy and parental health policies likely have a comparable impact on fellows. In addition, “parental health” encompasses multiple domains not restricted to childbearing and parental leave alone, but also including return-to-work policies and prenatal appointment scheduling for new parents, breastfeeding accommodations, and coverage policies for infertility treatments/assisted reproductive technology (ART). As such, the importance of parental and family health and necessary implementation of policies and strategies to optimize trainee well-being in this area cannot be overstated.

Current graduate medical education (GME) requirements at our institution include: 12 weeks childbearing for the birth mother (6 weeks paid time and 6 weeks unpaid time per the Family and Medical Leave Act—FMLA), 5 days of paid leave for any new parent (including parental leave, adoption, etc.—all leave not directly related to childbirth), and “reasonable break time” (estimated at a half-hour) and space for lactation. In a preliminary study of hematology–oncology fellows at this institution, 92.8% of respondents stated that they “strongly agree” or “agree” with the statement that “parental health is an important part of overall health and well-being for fellows,” yet only 7.1% stated that they had a good understanding of current policies and resources available pertaining to parental health. One hundred percent of the respondents felt it would be “very important” or “somewhat important” to have a comprehensive guide of policies and resources for parental health during fellowship training. Fellows discussed additional issues related to parental health including return-to-work, breastfeeding, and infertility management, which were not part of existing institutional guidelines and therefore created further challenges for trainees in areas where no guidance currently exists. [Marshall AL, unpublished data]. Therefore, we designed a comprehensive, subspecialty fellowship-wide survey study focusing on current policies for parental health, fellows’ knowledge of and attitudes regarding current policies, and fellows’ interest in development and incorporation of new and expanded parental health policies.

**Methods**

**Survey study**

After reviewing current GME parental leave policies at our three-site academic institution, we performed an Institutional Review Board (IRB)–approved review of current fellowship-specific parental health policies by contacting the fellowship program director and program coordinator at all subspecialty fellowship training programs with four or more trainees per year. Data collected included total fellows and male/female percentage over the 5-year period from 2015 to 2019, number of fellows taking parental leave, whether the program had additional parental health policies beyond general institutional GME policies, and if so the nature of these additional policies.

We then distributed an electronic survey to all subspecialty fellows (in any training program regardless of number of fellows per year) at our three-site institution. Weekly reminder emails were sent for a total of 4 weeks. The survey contained Likert-type-scale questions rating each participant’s level of knowledge and level of satisfaction with current parental health policies and grid-style questions regarding how important (on a scale of 1–5, 1 = not important at all and 5 = very important) trainees felt potential additions to the current policies would be.

**Data analysis**

Likert-type-scale and numeric question responses were analyzed using Pearson’s Chi-square test. Data analysis was performed with statistical analysis software (SAS).

**Results**

**Current fellowship parental health policies**

Of the 47 programs contacted, 35 (74%) responded, although not all programs provided all requested data. Based on available information, an average of 41% of fellows were female over the study period. Of programs that provided data on parental leave, 11% of female fellows...
took maternity leave and 15% of male fellows took paternity leave during the study period. Three (9%) of the programs had at least one additional parental health policy beyond the institutional GME policies, including overnight call modifications (one program), flexible return to work (one program), possible extended duration leave (one program), dedicated breastfeeding time and/or space (two programs), and offering program-specific information about childcare resources (one program). No program offered additional policies related to obstetrics and gynecology (OB–GYN) appointments during pregnancy, infertility management, or adoption assistance.

Fellow knowledge/satisfaction survey

The fellowship survey was distributed electronically to 609 fellows, 175 of whom responded (28.7%). Demographics of respondents are shown in Table 1. Eighty-four (48.6%) of responding fellows were female and 89 (51.4%) were male. Among respondents, female fellows were younger than male fellows (for trend, \( p=0.037 \)) and female fellows were more likely to be in surgical specialties (23.8% versus 13.5%). There were no significant differences between the female and male fellows with regard to ethnicity, whether they currently had children, or whether they planned to have children in the future.

Fellow responses to questions about overall parental health are shown in Table 2 and responses to questions about specific existing parental health policies are shown in Table 3. Overall, 156 (89.1%) of fellows agreed/strongly agreed that “parental health is an important part of health and well-being for fellows” (89% male, 89% female, \( p=0.91 \)) and 128 (73.1%) agreed that parental health somewhat/significantly applied to them (70% male, 76% female, \( p=0.34 \)). However, only 56 (32%) were satisfied/very satisfied with current policies (29% male, 36% female, \( p=0.36 \)). The percent of fellows who reported they were satisfied/very satisfied and the gender differences within the following areas included: 45 (25.7%) maternity/paternity leave (25% male, 27% female, \( p=0.69 \)), 39 (22.3%) return to work after maternity/paternity leave (25% male, 31.8% female, \( p=0.45 \)), and 37 (21.1%) breastfeeding (32.3% male, 21.1% female, \( p=0.0008 \)).

| Table 1. Respondent demographics. |
|-----------------------------------|
|                                   |
| All fellows | Female (N, %) | Male (N, %) | \( p \) |
| Age  |
| 25–30 | 175 (23.4%) | 84 (48.6%) | 89 (51.4%) | 0.037 |
| 31–35 | 107 (61.1%) | 49 (58.3%) | 57 (64.0%) |
| 36–40 | 17 (9.7%) | 6 (7.1%) | 11 (12.4%) |
| 41–50 | 8 (4.6%) | 2 (2.4%) | 6 (6.7%) |
| Prefer not to say | 2 (1.1%) | 1 (1.2%) |
| Ethnicity |
| Caucasian/White | 91 (53.2%) | 42 (51.9%) | 49 (55.1%) | 0.464 |
| Asian/Pacific Islander | 37 (21.6%) | 18 (22.2%) | 19 (21.3%) |
| Hispanic/Latino | 13 (7.6%) | 4 (11.1%) | 4 (4.5%) |
| African American | 5 (2.9%) | 2 (4.5%) | 3 (3.7%) |
| Native American | 1 (0.6%) | 1 (1.2%) | 0 (0.0%) |
| Other | 13 (7.6%) | 4 (4.9%) | 9 (10.1%) |
| Prefer not to say | 11 (6.4%) | 4 (4.9%) | 6 (6.7%) |
| Type of subspecialty fellowship |
| Medical | 134 (76.6%) | 64 (76.2%) | 68 (76.4%) | 0.004 |
| Surgical | 32 (18.3%) | 20 (23.8%) | 12 (13.5%) |
| Other | 9 (5.1%) | 0 (0.0%) | 9 (10.1%) |
| Do you currently have children |
| Yes | 106 (61.3%) | 52 (62.7%) | 54 (60.7%) | 0.790 |
| No | 67 (38.7%) | 31 (37.3%) | 35 (39.3%) |
| Do you plan to have children in the future |
| Yes | 57 (89.1%) | 27 (93.1%) | 29 (85.3%) | 0.509 |
| No | 1 (1.6%) | 0 (0.0%) | 1 (2.9%) |
| I don’t know | 6 (9.4%) | 2 (6.9%) | 4 (11.8%) |

Interest in new parental health policies

Fellow responses to interest in potential changes/additions to current parental health policies are shown in Table 4. The percentage of fellows rating the following potential interventions as important/very important included: 79.2% increased (paid) maternity leave (72.7% male, 86.7% female, \( p=0.02 \)), 78% increased (paid) paternity leave
Table 2. Respondent attitudes regarding overall parental health.

| Attitude | All fellows (N, %) | Female (N, %) | Male (N, %) | p   |
|----------|-------------------|---------------|-------------|-----|
| Parental health is an important part of health and well-being for fellows | | | | 0.613 |
| Strongly disagree | 14 (8.0%) | 8 (9.5%) | 6 (6.7%) | |
| Disagree | 1 (0.6%) | 0 (0.0%) | 1 (1.1%) | |
| Neutral | 4 (2.3%) | 1 (1.2%) | 3 (3.4%) | |
| Agree | 30 (17.1%) | 13 (15.5%) | 17 (19.1%) | |
| Strongly agree | 126 (72.0%) | 62 (73.8%) | 62 (69.7%) | |
| Parental health is an important part of health and well-being for fellows | | | | 0.913 |
| (Neutral/disagree) | 19 (11.9%) | 9 (10.7%) | 10 (11.2%) | |
| (Agree/strongly agree) | 156 (90.1%) | 75 (89.3%) | 79 (88.8%) | |
| To what extent does the concept of parental health apply to you? | | | | 0.312 |
| Not at all, and likely will not in the forseeable future | 7 (4.0%) | 1 (1.2%) | 6 (6.7%) | |
| Not at all currently, but may in the forseeable future | 40 (22.9%) | 19 (22.6%) | 21 (23.6%) | |
| Somewhat | 17 (9.7%) | 8 (9.5%) | 8 (9.0%) | |
| Significantly | 111 (63.4%) | 56 (66.7%) | 54 (60.7%) | |
| To what extent does the concept of parental health apply to you? | | | | 0.335 |
| (Not at all) | 47 (26.9%) | 20 (23.8%) | 27 (30.3%) | |
| (Somewhat/significantly) | 128 (73.1%) | 64 (76.2%) | 62 (69.7%) | |
| What is your current satisfaction with your own fellowship's policies regarding overall parental health? | | | | 0.942 |
| Not applicable to me | 20 (11.4%) | 9 (10.7%) | 11 (12.4%) | |
| Very dissatisfied | 6 (3.4%) | 2 (2.4%) | 3 (3.4%) | |
| Dissatisfied | 20 (11.4%) | 9 (10.7%) | 10 (11.2%) | |
| Neither satisfied nor dissatisfied | 73 (41.7%) | 34 (40.5%) | 39 (43.8%) | |
| Satisfied | 48 (27.4%) | 25 (29.8%) | 23 (25.8%) | |
| Very satisfied | 8 (4.6%) | 5 (6.0%) | 3 (3.4%) | |

(76.4% male, 81.9% female, \( p=0.37 \)), 72.3% part-time return to work (60.2% male, 84.3% female, \( p=0.0005 \)), 63% coverage for workup/management of infertility (52.3% male, 74.7% female, \( p=0.002 \)), and 79.9% on-site day care (70.7% male, 89.2% female, \( p=0.003 \)).

Discussion

We assessed current subspecialty fellowships’ parental health policies within a single academic medical center and found that few fellowships offer policies above and beyond the standard requirements for parental leave and breastfeeding covered in our institutional GME policy. In addition, we found that subspecialty fellows from a wide range of specialties consistently reported both that parental health was an important part of fellow health and well-being and were generally unsatisfied with current parental health policies. Fellows reported being interested in a wide range of potential additions/modifications to current policies, and fellows of both sexes were dissatisfied with their fellowships’ current policies regarding parental health. The only area where female trainees were significantly less satisfied with current policies was breastfeeding. In addition, both male and female fellows expressed interest in expanded parental health policies with trainees of both sexes equally interested in expanded paid maternity and paternity leave and female fellows more interested in part-time return to work policies, coverage for workup/management of infertility, and on-site day care.

Our results regarding physician dissatisfaction with relatively narrow parental health coverage options are similar to those from several prior studies. Practicing physicians in surgery, emergency medicine, and anesthesia have reported receiving limited (and in some cases no) paid coverage for parental leave and often report dissatisfaction with current coverage policies. Studies specific to medical residents have found a lack of uniform policies regarding parental leave with regard to funding and also clinical coverage for new parents across several specialty training programs including surgery, OB–GYN, family medicine, and dermatology. Trainees often report a perception of stigma and a lack of support for prospective and new parents, both by other trainees and by faculty.

Larger studies of parental leave policies across multiple specialties and institutions have similarly described a lack
| Question                                                                 | All fellows | Female (N, %) | Male (N, %) | p     |
|-------------------------------------------------------------------------|-------------|---------------|-------------|-------|
| What is your current understanding/knowledge of your own fellowship's   |             |               |             | 0.741 |
| policies regarding maternity/paternity leave?                           |             |               |             |       |
| I have no understanding of this at all because it does not apply to me | 17 (9.7%)  | 8 (9.5%)      | 9 (10.1%)   |       |
| I have no understanding of this at all but it is/may become applicable  | 35 (20.0%) | 15 (17.9%)    | 19 (21.3%)  |       |
| I have some understanding                                              | 76 (43.4%) | 35 (41.7%)    | 40 (44.9%)  |       |
| I have a very good understanding                                       | 47 (26.9%) | 26 (31.0%)    | 21 (23.6%)  |       |
| What is your current satisfaction with your own fellowship's policies   |             |               |             | 0.720 |
| regarding maternity/paternity leave?                                    |             |               |             |       |
| This is not applicable to me                                            | 29 (16.6%) | 15 (17.9%)    | 14 (15.7%)  |       |
| Very dissatisfied                                                       | 15 (8.6%)  | 5 (6.0%)      | 10 (11.2%)  |       |
| Dissatisfied                                                            | 33 (18.9%) | 16 (19.0%)    | 17 (19.0%)  |       |
| Neither satisfied nor dissatisfied                                      | 53 (30.3%) | 25 (29.8%)    | 28 (31.5%)  |       |
| Satisfied                                                               | 36 (20.6%) | 17 (20.2%)    | 19 (21.3%)  |       |
| Very satisfied                                                          | 9 (5.1%)   | 6 (7.1%)      | 3 (3.4%)    |       |
| What is your current satisfaction with your own fellowship's policies   |             |               |             | 0.690 |
| regarding return to work after maternity/paternity leave?              |             |               |             |       |
| (Not applicable/neutral/dissatisfied)                                  | 130 (74.3%) | 61 (72.6%)    | 67 (75.3%)  |       |
| (Satisfied/very satisfied)                                              | 45 (25.7%) | 23 (27.4%)    | 22 (24.7%)  |       |
| What is your current understanding/knowledge of your own fellowship's   |             |               |             | 0.907 |
| policies regarding return to work after maternity/paternity leave?     |             |               |             |       |
| I have no understanding of this at all because it does not apply to me  | 21 (12.0%) | 9 (10.7%)     | 12 (13.5%)  |       |
| I have no understanding of this at all but it is/may become applicable  | 53 (30.3%) | 26 (31.0%)    | 25 (28.1%)  |       |
| I have some understanding                                              | 78 (44.6%) | 37 (44.0%)    | 41 (46.1%)  |       |
| I have a very good understanding                                       | 23 (13.1%) | 12 (14.3%)    | 11 (12.4%)  |       |
| What is your current satisfaction with your own fellowship's policies   |             |               |             | 0.948 |
| regarding return to work after maternity/paternity leave?              |             |               |             |       |
| (Not applicable/neutral/dissatisfied)                                  | 136 (77.7%) | 63 (75.0%)    | 71 (79.8%)  |       |
| (Satisfied/very satisfied)                                              | 39 (22.3%) | 21 (31.8%)    | 18 (25.0%)  |       |
| What is your current understanding/knowledge of your own fellowship's   |             |               |             | <0.0001|
| policies regarding breastfeeding?                                       |             |               |             |       |
| I have no understanding of this at all because it does not apply to me  | 64 (36.6%) | 7 (8.3%)      | 57 (64.0%)  |       |
| I have no understanding of this at all but it is/may become applicable  | 32 (18.3%) | 23 (27.4%)    | 7 (7.9%)    |       |
| I have some understanding                                              | 60 (34.3%) | 40 (47.6%)    | 20 (22.5%)  |       |
| I have a very good understanding                                       | 19 (10.9%) | 14 (16.7%)    | 5 (5.6%)    |       |
| What is your current satisfaction with your own fellowship's policies   |             |               |             | <0.0001|
| regarding breastfeeding?                                                |             |               |             |       |
| This is not applicable to me                                            | 76 (43.4%) | 18 (21.4%)    | 58 (65.2%)  |       |
| Very dissatisfied                                                       | 2 (1.1%)   | 1 (1.2%)      | 1 (1.1%)    |       |
| Dissatisfied                                                            | 12 (6.9%)  | 9 (10.7%)     | 2 (2.2%)    |       |
| Neither satisfied nor dissatisfied                                      | 48 (27.4%) | 29 (34.5%)    | 18 (20.2%)  |       |
| Satisfied                                                               | 26 (14.9%) | 19 (22.6%)    | 7 (7.9%)    |       |
| Very satisfied                                                          | 11 (6.3%)  | 8 (9.5%)      | 3 (3.4%)    |       |
| What is your current satisfaction with your own fellowship's policies   |             |               |             | 0.0008 |
| regarding breastfeeding?                                                |             |               |             |       |
| (Not applicable/neutral/dissatisfied)                                  | 138 (78.9%) | 57 (67.9%)    | 79 (88.8%)  |       |
| (Satisfied or very satisfied)                                           | 37 (21.1%) | 27 (32.1%)    | 10 (11.2%)  |       |
of standardized/formal GME parental leave policy across specialties and lack of specific references about the impact of parental leave on clinical training (length and eligibility for specialty boards). While it has been established that parenthood during GME is an important component of trainee well-being, specific barriers to implementation of standardized policies that have been identified include: stigma, financial concerns, workforce and duty hour challenges, as well as the rigidly specified timeline of progression from one stage of medical training to the next.24

Our study offers not only confirmation of the limited current parental leave policies available to subspecialty trainees similar to what has previously been described, but also offers new insight into trainees interest in additions and modifications to existing policy. Previous studies have demonstrated trainee (and program director) dissatisfaction with

Table 4. Respondent interest in updated parental health policies.

| Policy Description                                                                 | All fellows | Female (N, %) | Male (N, %) | p     |
|-----------------------------------------------------------------------------------|-------------|---------------|-------------|-------|
| Increased (paid) maternity leave                                                  |             |               |             | 0.073 |
| Not important at all                                                              | 8 (4.6%)    | 2 (2.4%)      | 6 (6.8%)    |       |
| Slightly important                                                                | 5 (2.9%)    | 2 (2.4%)      | 3 (3.4%)    |       |
| Moderately important                                                              | 23 (13.3%)  | 7 (8.4%)      | 15 (17.0%)  |       |
| Important                                                                         | 37 (21.4%)  | 15 (18.1%)    | 22 (25.0%)  |       |
| Very important                                                                    | 100 (57.8%) | 57 (68.7%)    | 42 (47.7%)  |       |
| Increased (paid) paternity leave                                                  |             |               |             | 0.071 |
| Not important at all                                                              | 8 (4.6%)    | 2 (2.4%)      | 6 (6.7%)    |       |
| Slightly important                                                                | 10 (5.7%)   | 5 (6.0%)      | 5 (5.6%)    |       |
| Moderately important                                                              | 19 (10.9%)  | 8 (9.6%)      | 10 (11.2%)  |       |
| Important                                                                         | 36 (20.7%)  | 17 (20.5%)    | 19 (21.3%)  |       |
| Very important                                                                    | 101 (58.0%) | 51 (61.4%)    | 49 (55.1%)  |       |
| Increased (paid) paternity leave                                                  |             |               |             | 0.374 |
| (Moderately/slightly/not important)                                               | 36 (20.8%)  | 11 (13.3%)    | 24 (27.3%)  |       |
| (Important/very important)                                                        | 137 (79.2%) | 72 (86.7%)    | 64 (72.7%)  |       |
| Part-time return to work policy after leave                                       |             |               |             | 0.002 |
| Not important at all                                                              | 9 (5.2%)    | 2 (2.4%)      | 7 (8.0%)    |       |
| Slightly important                                                                | 12 (6.9%)   | 5 (6.0%)      | 7 (8.0%)    |       |
| Moderately important                                                              | 27 (15.6%)  | 6 (7.2%)      | 21 (23.9%)  |       |
| Important                                                                         | 43 (24.9%)  | 19 (22.9%)    | 23 (26.1%)  |       |
| Very important                                                                    | 82 (47.4%)  | 51 (61.4%)    | 30 (34.1%)  |       |
| Part-time return to work policy after leave                                       |             |               |             | 0.0005|
| (Moderately/slightly/not important)                                               | 48 (27.7%)  | 13 (15.7%)    | 35 (39.8%)  |       |
| (Important/very important)                                                        | 125 (72.3%) | 70 (84.3%)    | 53 (60.2%)  |       |
| Coverage for the workup/management of infertility                                 |             |               |             | 0.036 |
| Not important at all                                                              | 16 (9.2%)   | 6 (7.2%)      | 10 (11.4%)  |       |
| Slightly important                                                                | 17 (9.8%)   | 7 (8.4%)      | 10 (11.4%)  |       |
| Moderately important                                                              | 31 (17.9%)  | 8 (9.6%)      | 22 (25.0%)  |       |
| Important                                                                         | 47 (27.2%)  | 27 (32.5%)    | 20 (22.7%)  |       |
| Very important                                                                    | 62 (35.8%)  | 35 (42.2%)    | 26 (29.5%)  |       |
| Coverage for the workup/management of infertility                                 |             |               |             | 0.002 |
| (Moderately/slightly/not important)                                               | 64 (37.0%)  | 21 (25.3%)    | 42 (47.7%)  |       |
| (Important/very important)                                                        | 109 (63.0%) | 62 (74.7%)    | 46 (52.3%)  |       |
| On-site day care                                                                  |             |               |             | 0.049 |
| Not important at all                                                              | 8 (4.6%)    | 2 (2.4%)      | 6 (6.7%)    |       |
| Slightly important                                                                | 9 (5.2%)    | 3 (3.6%)      | 6 (6.7%)    |       |
| Moderately important                                                              | 18 (10.3%)  | 4 (4.8%)      | 14 (15.7%)  |       |
| Important                                                                         | 37 (21.3%)  | 18 (21.7%)    | 18 (20.2%)  |       |
| Very important                                                                    | 102 (58.6%) | 56 (67.5%)    | 45 (50.6%)  |       |
| On-site day care                                                                  |             |               |             | 0.003 |
| (Moderately/slightly/not important)                                               | 35 (20.1%)  | 9 (10.8%)     | 26 (29.2%)  |       |
| (Important/very important)                                                        | 139 (79.9%) | 74 (89.2%)    | 63 (70.8%)  |       |
current parental leave policy, whereas our study also demonstrated high trainee interest in specific interventions such as increased (paid) parental leave and options for part-time return to work. In addition, this is the first study, that we are aware of, to demonstrate trainee interest in coverage for the workup and management of infertility. Given that infertility is estimated to affect up to one in four female physicians (a rate higher than the non-physician population)\(^25\) and that current parental health policies do not offer time or financial coverage for the workup and management of infertility, this is an area that deserves further exploration and advocacy.\(^26\)

As a single institution (three-site) study, this study was limited in scope. We hope that by including all subspecialty trainees, regardless of specialty type or year in training, our survey responses reflect a relatively broad cross-section of trainees. The response rate of 28.7\%, although low, is not outside the range of response rates seen in other similar studies. There may, of course, be selection bias in that those trainees who chose to respond may find the issue of parental health to be of particular importance, therefore overstating the degree of importance of this topic for all trainees as a whole. Nonetheless, we believe that the strong nature of the responses indicating high rates of dissatisfaction with current policies and high rates of interest in addition to current policy are enough to warrant further advocacy to improve the status of parental health for all trainees.

Several organizations have begun to advocate for specific enhancements to parental health policy including increased paid parental leave (for both genders) and improved breastfeeding policies.\(^27\)\(^28\) Recent perspectives and health policy pieces from leaders in the field have advocated for the strengthening of existing parental leave policies as well as the creation of new policies in an effort to improve the experience for trainees as prospective and new parents. Recommendations put forth thus far include standardized leave policies across specialties, increased paid parental leave (at least 6–8 weeks and ideally 12 weeks), organization of clinical coverage for absent residents in a way that provides support rather than stigma, access to childcare as well as lactation facilities, and cultivation of cross-specialty trainee parenting collaboratives.\(^29\)\(^32\) We agree that these are all excellent suggestions and advocate for adoption of standardized policies at least at each institution (including residency as well as subspecialty training programs) that included expanded access to leave, flexible return scheduling, and breastfeeding policies. We also feel it is important that GME policy-makers consider coverage for infertility workup and management when developing institutional guidelines. Overall, increased coverage and an expanded definition of “parental health” may have the potential not only to increase trainee satisfaction and well-being but also lead to long-term benefits in gender equity in medicine. Providing trainees the time and support needed to be parents while also supporting their continued career development as physicians may help those, especially female physicians, who previously suffered career setbacks such as reduced research productivity and slower academic and leadership advancement while struggling to balance family and career. This is certainly worthy of further exploration in larger, longer-term studies.

We plan to use the results of this study to develop a specific set of guidelines to propose to our institutional GME Committee. We will advocate for the changes and additions discussed above and present our recommendations in the context of a desire to improve trainee health and well-being across the institution. Our hope is that such policy improvements will signal to trainees that GME officials put a priority on their health and the health of their families. We believe that happier and healthier trainees are likely to gain more from their educational experience, and also able to serve the needs of patients more effectively both during and after their training.

Conclusion

Parental health is an important component of health and well-being for physician trainees. However, current parental health policies are often unstandardized and limited in scope. Subspecialty fellows of both sexes at our institution reported that parental health is an important part of overall health and well-being, but most were not satisfied with current policies. Parental health includes multiple domains, not limited to parental leave as current policy dictates. Expanded access to parental leave and new policies covering part-time return to work, workup/management of infertility, and on-site day care are opportunities for innovative approaches to parental health and we plan to explore these options within our institution and ideally across GME programs nationwide.

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References

1. Sayres M, Wyshak G, Denterlein G, et al. Pregnancy during residency. *N Engl J Med* 1986; 314(7): 418–423.
2. Blair JE, Mayer AP, Caubet Norby SM, et al. Pregnancy and parental leave during graduate medical education. *Acad Med* 2016; 91(7): 972–978.
3. Finch SJ. Pregnancy during residency: a literature review. *Acad Med* 2003; 78(4): 415–428.

4. Franco K, Evans CL, Best AP, et al. Conflicts associated with physicians’ pregnancies. *Am J Psychiatry* 1983; 140(7): 902–904.

5. Kin C, Yang R, Desai P, et al. Female trainees believe that having children will negatively impact their careers: results of a quantitative survey of trainees at an academic medical center. *BMC Med Educ* 2018; 18(1): 260.

6. Riano NS, Linos E, Accurso EC, et al. Paid family and childbearing leave policies at top US Medical Schools. *JAMA* 2018; 319(6): 611–614.

7. Krause ML, Elrashidi MY, Halvorsen AJ, et al. Impact of pregnancy and gender on internal medicine resident evaluations: a retrospective cohort study. *J Gen Intern Med* 2017; 32(6): 648–653.

8. Magudia K, Bick A, Cohen J, et al. Childbearing and family leave policies for resident physicians at top training institutions. *JAMA* 2018; 320(22): 2372–2374.

9. Deech B. Women doctors: making a difference, https://www.nwpgmd.nhs.uk/sites/default/files/WIMreport.pdf (accessed 10 September 2018).

10. Walsh DS, Gantt NL, Irish W, et al. Policies and practice regarding pregnancy and maternity leave: an international survey. *Am J Surg* 2019; 218(4): 798–802.

11. Gaines T, Harkhani N, Chen H, et al. Current policies and practicing surgeon perspectives on parental leave. *Am J Surg* 2019; 218(4): 772–779.

12. MacVane CZ, Fix ML, Strout TD, et al. Congratulations, you’re pregnant! Now about your shifts. . . the state of maternity leave attitudes and culture in EM. *West J Emerg Med* 2017; 18(5): 800–810.

13. Pearson ACS, Dodd SE, Kraus MB, et al. Pilot survey of female anesthesiologists’ childbearing and parental leave experiences. *Anesth Analg* 2019; 128(6): e109–e112.

14. Rangel EL, Lyu H, Haider AH, et al. Factors associated with residency and career dissatisfaction in childbearing surgical residents. *JAMA Surg* 2018; 153(11): 1004–1011.

15. Hariton E, Matthews B, Burns A, et al. Pregnancy and parental leave among obstetrics and gynecology residents: results of a nationwide survey of program directors. *Am J Obstet Gynecol* 2018; 219(2): 199e1–119.

16. Wendling A, Paladine HL, Hustedde C, et al. Parental leave policies and practices of US Family Medicine residency programs. *Fam Med* 2019; 51(9): 742–749.

17. Gracey LE, Cronin M, Shinkai K, et al. Program director and resident perspectives on new parent leave in dermatology residency. *JAMA Dermatol* 2018; 154(10): 1222–1225.

18. Altieri MS, Salles A, Bevilacqua LA, et al. Perceptions of surgery residents about parental leave during training. *JAMA Surg* 2019; 154: 952–958.

19. Mwakyanjala EJ, Cowart JB, Hayes SN, et al. Pregnancy and parenting during cardiology fellowship. *J Am Heart Assoc* 2019; 8(14): e012137.

20. Humphries LS, Lyon S, Garza R, et al. Parental leave policies in graduate medical education: a systematic review. *Am J Surg* 2017; 214(4): 634–639.

21. Varda BK and Glover M 4th. Specialty board leave policies for resident physicians requesting parental leave. *JAMA* 2018; 320(22): 2374–2377.

22. Gottenborg E, Rock L and Sheridan A. Parental leave for residents at programs affiliated with the Top 50 Medical Schools. *J Grad Med Educ* 2019; 11(4): 472–474.

23. Stack SW, Eurchik KE, Kaplan EA, et al. Parenthood during graduate medical education: a scoping review. *Acad Med* 2019; 94: 1814–1824.

24. Webb AMB, Hasty BN, Andolsek KM, et al. A timely problem: parental leave during medical training. *Acad Med* 2019; 94: 1631–1634.

25. Stentz NC, Griffith KA, Perkins E, et al. Fertility and childbearing among American female physicians. *J Womens Health* 2016; 25(10): 1059–1065.

26. Marshall AL, Arora VM and Salles A. Physician fertility: a call to action. *Acad Med* 95: 679–681, https://journals.lww.com/academicmedicine/Abstract/publishahead/Physician_Fertility__A_Call_to_Action.97378.aspx (accessed 16 November 2019).

27. Canon CL, Enzmann DR, Grist TM, et al. Society of chairs of academic radiology departments statement of support for paid parental leave. *J Am Coll Radiol* 2019; 16(3): 271–272.

28. Englander MJ, Ghatan CE, Hamilton BN, et al. Society of interventional radiology position statement on parental leave. *J Vasc Interv Radiol* 2017; 28(7): 993–994.

29. McAuliffe CG, Rialon KL, Hipp DM, et al. Multispecialty resident perspectives on parental leave policies. *J Grad Med Educ* 2019; 11(3): 362–364.

30. Vassallo P, Jeremiah J, Forman L, et al. Parental leave in graduate medical education: recommendations for reform. *Am J Med* 2019; 132(3): 385–389.

31. Ortiz Worthington R, Feld LD and Volerman A. Supporting new physicians and new parents: a call to create a standard parental leave policy for residents. *Acad Med* 2019; 94: 1654–1657.

32. Weinstein DF, Mangurian C and Jagsi R. Parenting during graduate medical training—practical policy solutions to promote change. *N Engl J Med* 2019; 381(11): 995–997.