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## Childcare for Radiology Workers During the COVID-19 Pandemic: No Small Matter

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Life is ten percent what you experience and ninety percent how you respond to it.

## -Dorothy M. Neddermeyer

The coronavirus disease 2019 (COVID-19) pandemic has certainly taught us the value of preparedness and appropriate and swift response measures. As we begin to emerge from the first wave of the pandemic, the radiology community has many workforce considerations to address. How will radiology workers and patients be protected from contracting the coronavirus? How will social distancing be maintained? Are there appropriate processes in place to monitor for illness in radiology workers? How will practices manage fear and anxiety [1]?

Looming behind all these questions is one important question that has not yet been answered: who will take care of our children as we resume routine imaging services?

The COVID-19 pandemic led radiology practices all over the country to postpone nonurgent imaging examinations for at least 2 months to comply with state-ordered stay-athome policies and to preserve protective personal equipment and other resources for care of patients with COVID-19. This has left practices with a backlog of routine imaging examinations to complete and financial gaps to close. As practices reopen for routine imaging, they will be required to distance patients in time and space and to allow buffer time between patients for proper disinfection of equipment and rooms [2]. Many radiology practices will extend their regular hours to evenings and weekends to operate at full capacity [2], which in turn will require radiology staff members and radiologists to extend their usual work hours.

Access to childcare has been consistently listed as a source of anxiety for health care professionals during the COVID-19 pandemic [3]. At the same time as imaging volumes decreased, schools and many daycare facilities closed. Some practices provided employees with extra paid time off to care for children. However, if daycare facilities and schools remain closed or do not operate at their full capacity (for social distancing) during the recovery period, many workers may be left with nobody to care for their children. Additionally, schools and many daycare facilities are not open for the extended hours that will be required in the coming months. Radiology staff employees who have taken pay cuts as a result of the decreased revenues of the past 2 months will find it difficult to afford

childcare. For fear of exposing older family members to the coronavirus, radiology staff employees may be hesitant to ask grandparents to fill existing gaps in childcare.

To determine the magnitude of this problem within our own large academic radiology department, we distributed an anonymous eightquestion survey by e-mail to 1,350 faculty members, staff members, and trainees. A mix of multiple choice and open-ended questions inquired about role of the respondent in the department, the number of children in the household, gaps in childcare under various scenarios, and suggestions for assistance (Appendix 1). The survey was open for 8 days (April 24, 2020, to May 2, 2020), with a response rate of 14% (195 of 1,350). This response rate is reasonable for an e-mail-based survey considering the conditions under which it was administered (near the height of pandemic care at our institution). The survey illuminated several important issues, summarized as follows:

Reliable childcare is a critical need for radiology workers during this pandemic. A large majority (92% [180/195]) of respondents had children needing care, of whom 59% (107 of 180) had more than one child needing care. Of concern, 23% of respondents with children (41 of 180) reported having major gaps and 53% (95 of 180) minor gaps in their childcare needs at the time of the survey.

- The need for childcare spans all groups of radiology workers. Faculty members, residents and fellows, technologists, administrators, and clerical and other staff members all cited challenges with childcare during the pandemic. The problem is not unique to any one group, with 64% of faculty members (14 of 22), 78% of technologists (63 of 81), 82% of administrators (9 of 11), and 70% of clerical and other staff members (37 of 53) having major or minor gaps in childcare at the time of the survey. Remarkably, 100% of the residents and fellows with children (13 of 13) cited major (38% [5 of 13]) or minor (62% [8 of 13]) gaps in childcare at the time of the survey, likely a reflection of the younger age of the parents and children in this group.
- Those who can work from home are not exempt from the need for childcare. Multiple respondents expressed challenges with working while simultaneously supervising small children or assisting schoolage children with online learning. (Appendix 2)
- The absence of childcare resources for radiology workers could limit practices' abilities to increase volumes. We asked participants the following question: "Assuming daycare centers do not open in June and we return to a full clinical schedule, which of the following best expresses your future childcare needs?" In response, the majority of survey participants anticipated gaps in childcare, 35% (63 of 180) major and 44% (80 of 180) minor. A

disquieting 32% of survey respondents (58 of 180) stated that they would either be unable to come to work or have major challenges coming to work.

It is notable that several respondents mentioned the stress of working during the pandemic, feeling generally overwhelmed with parenting responsibilities, or a sense of desperation (Appendix 2). These feelings cannot be ignored, because they signal burnout and could contribute to development of mental health disorders in radiology workers [4]. A recent survey of families with children in England performed by Andrew et al [5] found that on an average, parents are devoting longer hours to childcare (9 hours compared with 5.5 hours before lockdown) and fewer hours to paid work (3 hours compared with 6.5 hours), likely driven by the job losses. Also, parents often tend to do at least two activities at the same time. Although parenting responsibilities are not unique women, societal to gender expectations and roles typically lead to women's shouldering higher burden of these responsibilities than men. The same survey reported that mothers are 1.5 times more likely to have lost their jobs or voluntarily quit since the start of the lockdown [5].

Another interesting aspect of the survey by Andrew et al [5] was the effect on parenting responsibilities in dual-career households when one parent loses a job. The authors found that when mothers quit their jobs, they do twice as much childcare and housework as their partners, while these responsibilities are shared equally when the father stops working (and the mother continues paid work) [5]. These factors could have an important downstream effect on women's career advancement as well as happiness and well-being. In our own departmental survey (before COVID-19), baseline burnout rates were found to be twice as high in women as in men (38% versus 19%). This highlights the importance of watchful support of radiology workers, especially women and other vulnerable groups such as single parents, who are likely to face even higher pressures.

Increasing imaging volumes and expanding practice hours will require a thoughtful approach and careful attention to the issue of childcare to maintain an adequate radiology workforce and to prevent burnout. Larger health systems could consider providing subsidized or free childcare on site, with extended hours to accommodate those working during evenings or weekends. Smaller practices could assist employees with locating childcare facilities with extended hours and by providing subsidies for care. All practices should recognize their individual workers' needs for assistance with childcare and be as flexible with staff scheduling as possible.

## ADDITIONAL RESOURCES

Additional resources can be found online at: https://doi.org/10.1016/j. jacr.2020.06.008.

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