



Research Article

Attitudes and Willingness of Emergency Medicine Residents to Report to Work during an Earthquake or Pandemic

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Abstract

Background: Most research on willingness and preparedness for work during a disaster has been directed towards nurses and attending physicians. **Objective:** The objective is to identify determinants of emergency medicine residents' willingness to work during an earthquake or pandemic. **Materials and Methods:** An online survey was administered through the Council of Residency Directors in Emergency Medicine listserv and website in spring, 2018. Participants were presented with scenarios then assessed on their willingness to work during an earthquake, or a pandemic with and without N95s. Proportions tests were used to assess differences in agreement between attitude/belief questions. Multivariate logistic regression was used to determine factors associated with *willingness to work when requested*. **Results:** 102 residents participated. Almost all indicated that they would work when requested during an earthquake (98%) or pandemic with N95s (89.2%). Willingness was higher when requested when N95s are available compared to when depleted (89.2% vs. 64.7%, $p < .001$). Other predictors of willingness to work during a pandemic with N95s included believing that their employer values them (OR=15.5; CI=1.4-166; $p < 0.05$) and not having any children (OR=8.0; CI=1.1-55; $p < 0.05$). Determinants of willingness to work during a pandemic when N95s are depleted included having no fear of illness (OR=7.4; CI=1.3-42.7; $p < 0.05$), believing that their family can function without them (OR=6.8; CI=1.6-29.4; $p = 0.01$), and feeling safe about going to work (OR=4.2; CI=1.4-12.6; $p = 0.01$). **Conclusion:** Most EM residents are willing to work during either an earthquake or pandemic, though fewer will work during a pandemic if N95s are depleted.

Keywords: Disaster medicine; Disaster management; Disaster planning; Emergency medicine resident

Introduction

The ability and willingness of all healthcare workers to respond to work in disaster situations is essential to successfully managing the significant surge of patients that may be seen in disasters. The reason for not reporting to work has been shown to be multi-factorial in prior research, depending on the disaster type, structural damage to the community, family dynamics, and other psychological and emotional considerations. Prior research has shown decreased willingness to work in disasters where the healthcare worker is at potential risk of harm, such as infectious and radiologic events, compared to those causing structural damage, such as earthquakes [1-4]. A 2005 study by Qureshi [5] found a willingness to report rate of 48% during a SARS outbreak versus 86% and 80% during a snowstorm or mass casualty incident, respectively. This low rate of willingness to work during outbreaks improves with decreased sense of risk, however, such as with provision of vaccine and adequate personal protective equipment. Willingness is also impacted by perceived role and relevance to the disaster, as well as perceived value of the employee to the institution [6-9].

This perception of role importance and willingness to work becomes particularly relevant for resident physicians, who contribute a significant portion of the available physician labor at academic hospitals. While their role will be essential to addressing a patient surge in disasters, their position as a

student and not an employee may impact their willingness to work during disasters. Charney et al. [2], found that residents reported a willingness to report rate lower than that of attending physicians for both pandemic and earthquake scenarios (84.5% vs. 90.6% for pandemics, 94.3% vs. 97.2% for earthquakes, respectively). However these results represented low numbers of respondents and significance could not be determined. An additional survey of seven emergency residency programs found similar rates or willingness to work between residence and faculty members, except for known nuclear events, where residents were significantly less willing to work [10]. Contrary to other studies, however, this study also found the lowest willingness to work rate during natural disasters compared to other scenarios. The purpose of this study is to evaluate emergency medicine residents' willingness and ability to work during an earthquake versus a pandemic. A secondary aim is to delineate factors associated with emergency medicine residents' willingness and ability to work in both scenarios.

Materials and Methods

An online survey was available via Qualtrics (Qualtrics software. Copyright © 2018. Qualtrics and all other Qualtrics product or service names are registered trademarks or

trademarks of Qualtrics, Provo, UT, USA. <https://www.qualtrics.com>) to emergency medicine residents in spring, 2018. The recruitment statement was posted on a website through the Council of Residency Directors in Emergency Medicine. The website link was sent to subscribers of the listserv (i.e. program directors or program coordinators) who were encouraged to forward to their residents. All emergency medicine residents were eligible to participate. Questionnaires used in past willingness to work during disaster surveys were used to develop this study's instrument [2,5-7,11-14]. Participants were presented with two disaster scenarios: an earthquake and an influenza pandemic. For the earthquake scenario, participants were told that public transportation was disrupted, but there were no injuries or damage to their hospital, their home, or their household members. The influenza pandemic scenario was presented in two parts: when the outbreak first hits the residents' region and one month later when the hospital has run out of respiratory protection. Participants were told that a new deadly strain of avian influenza has hit the U.S. and their region, and healthcare facilities are experiencing large patient surges of community members requiring intensive care; in addition, some of their coworkers have fallen ill. After each scenario is presented, participants were given a series of attitudinal and belief questions regarding their ability and/or willingness to work and factors that influence their decision. The following were assessed for both scenarios: 1) ability and willingness to work when requested or required; 2) knowledge of the event's impact, 3) perceived social norms, 4) risk perception, 5) perceived institutional support, 6) self-efficacy, 7) impact of having pandemic vaccine available, and 8) perceived barriers to working. Willingness and ability to work, and all attitude/belief questions were measured on a five-point Likert scale. Nine perceived barriers were assessed: 1) transportation; 2) childcare; 3) elder care; 4) pet care; 5) concern for family; 6) perceived preparedness of family, 7) fear of personal harm; 8) different role in disaster response; and 9) fear of losing job. Barrier questions were measured on a 3-point Likert scale (very strong barrier to not a barrier). In addition, demographics were assessed.

Eight U.S. disaster preparedness researchers provided feedback on questionnaire content validity, then the content validity index (CVI) was computed for each item [15]. Four items had a CVI below 0.80 and were deleted; three additional questions were revised based on feedback from the CVI panel. The final survey contained 41 questions plus demographic items. The questionnaire was then pilot tested using a group of 10 medical residents from a variety of specialties. The study was approved by the university's Institutional Review Board.

Data analysis

The Statistical Package for the Social Sciences (SPSS®) 25.0 and R 3.5.0 [16] were used for all analyses. Likert-type questions were dichotomized into agree versus disagree. McNemar tests were used to evaluate differences in agreement between willingness to work when requested versus required, during a pandemic when N95s are available versus when they are depleted, and attitudes/beliefs and

barriers to working during a pandemic versus during an earthquake. Chi square tests were used to compare those with versus without children and their attitudes/beliefs about willingness to work during both scenarios; Fishers Exact tests were used when cell counts were five or fewer. An independent samples t-test was conducted to compare those with versus without children and their reported number of barriers to working during a disaster. Multivariate logistic regression was used to determine factors associated with willingness to work when requested. Chi square tests were used to identify potential predictors for willingness to work; all attitudes/belief questions, perceived barriers, and demographics were evaluated. Significant variables from univariate analyses were included in hierarchical multivariate logistic regression analyses to identify predictors of willingness to work when requested during a pandemic with or without N95s or when required during an earthquake. Only final multivariate models are reported. Logistic regression could not be conducted examining willingness to work when requested during an earthquake due to the low number of residents reporting unwillingness to work. A critical p-value of .05 was used for all analyses.

Results

In all, 102 emergency medical residents participated in the study. A little more than half of the participants were male (56.9%, n=58; Table 1). About 60% of the participants (60.8%, n=62) were between the ages of 18 years and 30 years, and 39.2% of the participants (n=40) were 31 years or older (Table 1). The majority of the participants (78.4%, n=80) were white (Table 1). Most (70.6%, n=72) were married. About 20% (18.6%, n=19) have one or more children under the age of two years, 11.8% (n=12) has one or more children between the ages of two years to five years, and 4.9% (n=5) have one or more children between the ages of six years and eleven years (Table 1).

	N=102% (n)
Gender - Male	56.9 (58)
Age	
18 – 30 years	60.8 (62)
31 years or older	39.2 (40)
Race - White	78.4 (80)
Marital Status - Married	70.6 (72)
Current Year of Residency	
1 st year	33.3 (34)
2 nd year	28.4 (29)
3 rd year	24.5 (25)
4 th year	13.7 (14)
Have a Child in the Following Age Group	
<2 years	18.6 (19)
2 years – 5 years	11.8 (12)
6 years – 11 years	4.9 (5)
12 years – 17 years	0.0 (0)
Have a Dependent in the Following Group	
Pet or animal	61.6 (61)
Child of any age	23.5 (24)

Elderly person not living with resident	6.0 (6)
Disabled person	2.0 (2)
Elderly person living with resident	0.0 (0)

Table 1: Participant demographics.

Willingness and ability to respond to an earthquake or pandemic

Almost all emergency medicine residents (96.1%, n=98) indicated that they would be able to work during an earthquake, or that they would be willing to work if their residency director only requested, but did not require it (98.0%, n=100), or if it was required (96.1%, n=98; Table 2). Significantly more residents were willing to work during an earthquake if requested versus when required (98.0% vs. 96.1%, $X^2 = 50$, $p < 0.001$). Significantly fewer residents who

had at least one child were willing to work when requested during an earthquake compared to those without children ($X^2 = 50$, $p < 0.001$). Those who reported having an elderly or disabled person dependent upon them or needing care for such an individual were significantly less willing to work when requested during an earthquake compared to those without such responsibility ($p < 0.05$ for both comparisons). Other factors associated with residents' willingness to work when requested during an earthquake included believing that their family was prepared to function without them ($X^2 = 8.4$, $p < 0.01$), not having a spouse who also be expected to work during the earthquake ($X^2 = 4.7$, $p < 0.05$), perceiving that coworkers would report to work ($X^2 = 5.9$, $p < 0.05$), and believing that it is their responsibility to work ($X^2 = 18.8$, $p < 0.001$). When examining predictors for willingness to work during an earthquake when required, the only significant predictor was perceiving that their family was prepared to function without them (OR=14.3 CI: 1.4-146, $p < 0.05$).

Statement	All Residents N=102	Have ≥ 1 Child vs. No Children N = 102		
	Strongly Agreed or Agreed % (n)	No Children N=76	Have ≥ 1 Child N=26	Child vs. No Child
		Strongly Agreed or Agreed % (n)	Strongly Agreed or Agreed % (n)	p value*
I would go to work if requested, but not required	98.0 (100)	100 (76)	92.3 (24)	<0.05
I would be able to work	96.1 (98)	96.1 (73)	96.2 (25)	NS
I would go to work if my residency director required it	96.1 (98)	100 (76)	84.6 (22)	<0.001
My co-workers are likely to work	93.1 (95)	94.7 (72)	88.5 (23)	NS
I believe it is my responsibility to go to work during this event	90.2 (92)	94.7 (72)	76.9 (20)	<0.01
Hospital would provide me with personal protective equipment to protect me	86.3 (88)	88.2 (67)	80.8 (21)	NS
My family is prepared or able to function without me if I were to work	80.4 (82)	85.5 (65)	65.4 (17)	<0.05
I would feel safe going to work	65.7 (67)	69.7 (53)	53.8 (14)	NS
I could safely get to work	60.8 (62)	67.1 (51)	42.3 (11)	<0.05
My residency director will expect me to work	56.9 (58)	60.5 (46)	46.2 (12)	NS
This event could have serious negative effects on my health	46.1 (47)	43.4 (33)	53.8 (14)	NS

Table 2: Emergency medicine residents' ability, willingness, and attitudes/beliefs about working during an earthquake.

Almost all residents (90.2%, n=92) indicated that they would be able to work during a pandemic when respiratory protection was available (Table 3). Most would be willing to work in this scenario if it was requested but not required (89.2%, n=91; Table 3); significantly more were willing to work if it was required (96.1%, $X^2 = 34.4$, $p < 0.001$). Residents' willingness to work when requested, but not required decreased significantly when the pandemic scenario involved a depletion of N95s (64.7% when depleted vs. 89.2% willing to work when respirators available, $X^2 = 16.7$, $p < 0.001$). If required, residents were more willing to work during a pandemic when N95s are available compared to those when respirators are depleted (96.1% vs. 77.5%, $X^2 = 14.3$, $p < 0.001$). However, in a scenario involving depleted N95s, significantly more residents were willing to work when required compared to when they were only requested to work (77.5% vs. 64.7%, $X^2 = 47.3$, $p < 0.001$). A little more than a third (38.2%, n=63) indicated that they would only work

during a pandemic in which N95s were depleted if they were offered a pandemic vaccine.

The strongest predictor of residents' willingness to work when requested during a pandemic in which N95 respirators are available was the belief that their fellow residents and co-workers would likely report to work during this scenario (OR=90.6; CI=4.6 – 769; $p < 0.001$; Table 4). Other predictors of willingness to work during a pandemic when N95s are available included not being concerned about being asked to do additional or new duties during the event, believing that their hospital administrators value them as an employee, and not having at least one child (Table 4). Predictors of willingness to work during a pandemic when N95s are depleted were different than those for when respiratory protection is available. Determinants of willingness to work during a severe pandemic when N95s are insufficient included having no fear of illness, believing that his/her family is prepared to function without him/her, and feeling safe about

going to work during this scenario (Table 4). No other attitudes and beliefs or demographic variables were significant

predictors of willingness to work during either pandemic scenario.

Statement	All Residents N=102 Strongly Agreed or Agreed % (n)	Have ≥ 1 Child vs. No Children N=102		
		No Children N=76	Have ≥ 1 Child N=26	Child vs. No Child
		Strongly Agreed or Agreed % (n)	Strongly Agreed or Agreed % (n)	p value*
This event could have serious negative effects on people's health	99.0 (101)	98.7 (75)	100 (26)	NS
I would go to work if my residency director required it	96.1 (98)	98.7 (75)	88.5 (23)	<0.05
I could safely get to work	95.1 (97)	96.1 (73)	92.3 (24)	NS
This event could have serious negative effects on my health	91.2 (93)	90.8 (69)	92.3 (24)	NS
I would be able to work	90.2 (92)	93.4 (71)	80.8 (21)	NS
I would go to work if requested, but not required	89.2 (91)	96.1 (73)	69.2 (18)	<0.001
Hospital would provide me with personal protective equipment to protect me	87.3 (89)	89.5 (68)	80.8 (21)	NS
I believe it is my responsibility to go to work during this event	86.3 (88)	92.1 (70)	69.2 (18)	<0.01
My co-workers are likely to work	86.3 (88)	90.8 (69)	73.1 (19)	<0.05
My family is prepared or able to function without me if I were to work	82.4 (84)	88.2 (67)	65.4 (17)	<0.01
My residency director will expect me to work	62.7 (64)	65.8 (50)	53.8 (14)	NS
I would feel safe going to work	47.1 (48)	48.7 (37)	42.3 (11)	NS
Influenza Pandemic Involving a Depletion of N95 Respirators and Masks	Strongly Agreed or Agreed % (n)	No Children N=76	Have ≥ 1 Child N=26	Child vs. No Child
		Strongly Agreed or Agreed % (n)	Strongly Agreed or Agreed % (n)	p value*
		I would go to work if my residency director required it	77.5 (79)	80.3 (61)
I would go to work if requested, but not required	64.7 (66)	64.5 (49)	65.4 (17)	NS
I would work only if a pandemic influenza vaccine were made available to me	38.2 (39)	35.5 (27)	46.2 (12)	NS

*Determined by the X² test (or Fisher's Exact when cell sizes ≤ 5); NS = Non-significant

Table 3: Emergency medicine residents' ability, willingness, and attitudes/beliefs about working during a pandemic.

Factors	Willing to Work if Requested: N95s Available		Willing to Work if Requested: N95s Not Available	
	OR (95% CI)*	p	OR (95% CI)*	p
Belief that their co-workers are likely to work	90.6 (4.6 - 769)	<0.01	NIM	
No concern regarding being asked to do additional or new job duties	32.1 (1.4 - 735)	<0.05	NIM	
Belief that hospital administration values them as an employee	15.5 (1.4 - 166)	<0.05	NIM	
Not having at least one child	8.0 (1.1 - 55)	<0.05	NIM	
No fear of illness	NIM		7.4 (1.3 - 42.7)	<0.05
Perception that family is prepared to function without him/her	NIM		6.8 (1.6 - 29.4)	=0.01
Would feel safe going to work during the pandemic	NIM		4.2 (1.4 - 12.6)	=0.01

*OR = odds ratio; CI = Confidence interval; NS = Non-significant; NIM = Not in model

Table 4: Factors related to willingness to work if requested during a pandemic in which n95 respirators are or are not available.

Residents were significantly more able and willing to report to work during an earthquake versus a pandemic with available N95s if their residency director required it (p<0.05

for both comparisons). In addition, significantly more residents were willing to work during an earthquake if requested but not required compared to those willing to work

when requested during a pandemic when N95s were available (98.0% vs. 89.2%, $X^2 = 5.3$, $p < 0.05$).

Perceived barriers and responsibilities that may affect willingness to work

Over half of the respondents (61.6%, $n=61$) indicated that a pet or animal is dependent on them, and about a quarter (23.5%, $n=24$) reported having at least one child who depends upon them for daily, regular care (Table 1). Few residents reported that an elderly or disabled person is dependent upon them for daily care or support. Only 2% ($n=2$) reported having responsibility to care for a disabled person; 6% ($n=6$) have responsibility for an elderly person who does not live with them and no one reported having responsibility for a live-in elderly individual (Table 1).

Residents were asked about seven possible barriers to working during disasters. The most frequently reported barriers were concern for family and fear of personal injury or illness (83.3% and 76.5%, respectively; Table 5). The least frequently reported barriers included a need for public transportation and the need to provide care to an elderly or disabled individual (18.6% and 6.9%, respectively; Table 5). On average, residents reported having three barriers (range: 0 – 7; s.d. 1.4). Residents who have at least one child reported significantly more barriers compared to those without children (4 vs. 2.6, $t = -4.5$, $p < 0.001$). Having a child was also significantly associated with reporting concern for family members as a barrier to working during a disaster ($X^2 = 7.0$, $p < 0.01$).

Perceived Barrier	N=102 Somewhat or Very Strong Barrier % (n)
Concern for family	83.3 (85)
Fear of injury or illness	76.5 (78)
Need for pet care	47.1 (48)
Concern regarding being asked to do additional or new job duties	44.1 (45)
Need for childcare	22.5 (23)
Need for public transportation	18.6 (19)
Need for care of an elderly, disabled, or other adult needing assistance	6.9 (7)

Table 5: Percentage of emergency medicine residents’ reporting perceived barriers to working during a disaster.

Attitudes and beliefs related to working during an earthquake or pandemic

Most residents reported believing that it is their responsibility to work during either an earthquake or pandemic, though more believed it is their responsibility to work during an earthquake (90.2% vs. 86.3%, $X^2 = 12.3$, $p < 0.001$). Those without children were significantly more likely than those with at least one child to report believing it is their responsibility to work during either an earthquake or pandemic ($p < 0.01$ for both comparisons; Table 2 and 3). Significantly more residents reported believing that their

residency director will expect them to work during a pandemic compared to during an earthquake (62.7% vs. 56.9%, $X^2 = 31.7$, $p < 0.001$). Most residents reported believing that their fellow residents and other co-workers would work during either an earthquake or pandemic, though more believed their colleagues would work during an earthquake (93.1% vs. 86.3%, $X^2 = 21.1$, $p < 0.001$). Those without children were significantly more likely than those with at least one child to report believing their colleagues would work during a pandemic (90.8% vs. 73.1%, $X^2 = 5.1$, $p < 0.05$; Table 2 and 3). Few residents (15.7%, $n=16$) reported believing that they would lose their residency position if they refused to work during a disaster.

Discussion

Overall, this study found that many emergency medicine residents were willing to work during either an earthquake or a pandemic. However, more residents were willing to work when requested during an earthquake than during a pandemic. These findings are similar to previous studies examining other groups of healthcare and public health professional personnel’s willingness to work during disasters [2,5,11,17]. A unique finding in this study is that emergency medicine residents reported a much higher willingness to work during an earthquake than studies examining other general healthcare personnel (96% of residents in this study versus 84% - 90% of nurses, physicians, and hospital ancillary staff in past studies [2,5]).

In this study, family obligations were the most significant predictors of residents’ willingness to work during an earthquake. Those with at least one child or a dependent elderly or disabled person were significantly less willing to work during an earthquake than those without such responsibilities. The belief that their family is prepared to function in their absence is a significant predictor of residents’ willingness to work during an earthquake when required. These findings are congruent with previous studies, and highlight the theoretical importance of healthcare personnel engaging in personal disaster planning [2,17-21]. Few studies have examined healthcare personnel personal preparedness, but all have found that most healthcare professionals lack many essential components of household disaster preparedness, such as a stockpile of food and water, back-up childcare plans, and a reunification plan for family members [17,21,22]. Research indicates that personal preparedness is associated with better resilience and health outcomes post-disaster [21]. Furthermore, healthcare facilities could enhance their worker surge capacity if they encourage their staff to develop personal disaster plans. Organizations might consider incentivizing personal preparedness among staff as well as providing on- or off-site child care, either subsidized or sponsored by the hospital; these actions could mitigate absenteeism among healthcare personnel [22].

Similar to previous research [2,5], this study found that emergency medicine residents are less willing to work during a pandemic compared to during an earthquake, even when personal protective equipment in the form of N95 respirators are available. In this study, almost all (90%) of the residents reported being willing to work during a pandemic if N95s are

available to them. The belief that hospital administration valued them as an employee, and the belief that their colleagues would also work were predictors of residents' willingness to work during a pandemic when N95s are available. Both of these factors make up the larger concepts of organizational commitment or organizational attachment that have been demonstrated to improve job performance, attendance, and willingness to take on extra responsibilities in healthcare settings [23-26]. Anticipating that their resident colleagues would work during a pandemic is a social norm and supports the theory of "psychological contracts", which indicates that a bolstered sense of implicit mutual obligation based on rapport and earned respect may contribute to perceived organizational support and willingness to work [27-29].

This study found that less than three-quarters of emergency medicine residents feel valued by their hospital administration, and yet it was a significant predictor of working during a pandemic. Hospitals would benefit from using this information to provide more administrative and interpersonal support for residents. There are many tangible ways that an organization can show appreciation for its employees, including financial compensation, promotions, extra time off, and public recognition. Some of the less easily quantifiable factors that contribute to strengthening an employee's psychological contract and organizational attachment include emotionally intelligent behaviors by direct leadership, interpersonal ties with colleagues, mentor relationships, and a sense of justice within the organization.³⁰⁻³² If such a supportive culture was cultivated prior to a disaster, it could contribute to residents' feeling of value and therefore strengthen the psychological contract between administration and clinical staff, likely resulting in more employees being willing to come to work during a pandemic [30-32].

Although most of the emergency medicine residents reported being willing to work during a pandemic when N95s are available, their willingness to work dropped significantly when the scenario indicated that respiratory protection was no longer available. Multiple studies conducted during the H1N1 pandemic found that many U.S. healthcare agencies ran out of N95s [33,34] and surge capacity studies have found that insufficient access to N95 respirators is likely to occur in a future pandemic [35-37]. When healthcare facilities lack N95s during a pandemic, healthcare personnel are forced to either re-use respirators or use a non-NIOSH approved mask or respirator [38-40]. This can leave staff at risk from occupational exposure and contributes to their unwillingness to work. It is critical that healthcare facilities plan in advance for this scenario so that protective measures are in place to ensure residents' safety and willingness to work. In addition to stockpiling respiratory protection--both disposable and reusable--healthcare facilities can also help protect staff during a pandemic by mandating or encouraging vaccination with the pandemic vaccine once it becomes available [41,42].

An interesting finding from this study is that only about half of the residents believed that their residency director would expect them to work during an earthquake or pandemic, and very few perceived that they would lose their residency position for refusal to work. Residents are

considered a vital component of hospital clinical staff, and emergency medicine residents in particular would be essential to responding to any type of disaster when the inevitable patient surge occurs. As essential members of the healthcare team, residents may also have an ethical obligation to work during disasters [43-45]. Hospitals and/or residency directors should inform all medical residents about policies regarding role expectations and attendance during disasters and resulting disciplinary action for non-compliance. This information should be coupled with an emphasis on protective measures that will be provided by the hospital as well emphasizing the importance of personal preparedness to enable the resident to work during disasters.

Limitations

A limitation of this study is the unknown, but likely low response rate. The exact response rate is impossible to calculate given the recruitment method used (i.e., a recruitment statement was posted on a website and residency program directors were informed of the website via listserv that they subscribe to). The listserv subscribers would have to forward the email to the residents to do; there is no way to know how many residents saw the study invitation. Another limitation is the possibility of social desirability bias, though the study was anonymous to minimize this risk. Lastly, it is likely that this study involves some selection bias. Residents who are more interested in disaster preparedness were probably more likely to complete the survey. Strengths of this study include that it is used a national sample and it is the first to assess emergency medical residents' ability and willingness to work during disasters; other studies in this field have focused solely on healthcare personnel employed directly the hospital, such as nurses and ancillary staff. This is also the first study to examine willingness to work during a pandemic during a scenario that involves a lack of N95 respirators, a common but high-risk scenario for healthcare personnel.

Conclusion

Hospitals can increase staff surge capacity by encouraging residents to have personal disaster plans and implementing interventions, such as addressing family obligations, to ensure these vital staff can work during disasters. Interventions that build trust and appreciation between residents and administration, as well as goal setting and expectations for residents in these situations are imperative.

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