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POPULATION STUDY

Experience of parents of preschool children in Hawaii during the COVID-19 pandemic

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Abstract

Objective: The COVID-19 pandemic has resulted in major disruption to economic, health, education, and social systems. Families with preschool children experienced extraordinary strain during this time. This paper describes a qualitative study examining the experience of parents of preschool children in Hawaii during the COVID-19 pandemic.

Sample: Thirteen ($N = 13$) parents of preschool children living on the island of Oahu, Hawaii, participated in small group discussions occurring in February and March 2021, approximately 1 year after the start of the pandemic in the state. Discussion transcripts were coded and sorted into themes.

Results: Four themes emerged: stressors due to the COVID-19 pandemic, family coping and resources, meaning of the COVID-19 crisis to the family, and family adaptation patterns. Themes mapped to the Family Adjustment and Adaptation Response model.

Conclusion: Families relied on various resources to cope with stressors experienced due to the COVID-19 pandemic, and adopted new patterns related to seeking healthcare and household emergency preparedness. Findings may inform policies and interventions to support families during the ongoing COVID-19 pandemic and future public health emergencies.

KEYWORDS
community health nursing, emergency preparedness, family health, pandemic, qualitative research

1 | INTRODUCTION

The COVID-19 pandemic started when a novel virus emerged in Wuhan, China in December 2019 and then spread rapidly around the globe (CDC, 2021). In the State of Hawaii, government leaders issued public health measures to slow the spread of the virus, including mandated quarantine/isolation and social distancing. In March 2020, Hawaii became the first US state to require incoming travelers to quarantine for 14 days. Honolulu's municipal government issued multiple stay-at-home orders, closing all parks, beaches, and non-essential businesses. Gatherings were banned or severely restricted. Schools were closed to in-person education for a 9-month period (March–November 2020) (State of Hawaii Department of Health, 2021). While such measures contributed to "flattening the curve" of infection, they also resulted in major disruption to the state's economy, health, education, and social systems (Buenconsejo-Lum et al., 2021).

Parents of young children experienced extraordinary strain during the pandemic, simultaneously balancing the burdens of working from home, childcare, and household responsibilities (Lateef et al., 2021). Multiple stressors challenged families with children, including financial difficulties, loss of social support systems, and conflicting roles in the household related to working from home and providing children with

caregiving or education (Gassman-Pines et al., 2020; Weaver & Swank, 2021). A nationwide survey found that parents with children age 18 or younger experienced worsening mental health, increasing food insecurity, decreased health insurance coverage, and loss of childcare during the pandemic (Patrick et al., 2020). Half of employed parents with children younger than 12 reported difficulty meeting childcare responsibilities (Pew Research Center, 2020). Disparities in impact of the pandemic on families with school-age children also occurred, with families of color experiencing more adverse hardships (Chen et al., 2021). This study examined the experience of parents with preschool children in Hawaii during the COVID-19 pandemic. It sought to bring to light ways that families adapted to various pressures exerted on them and ways they adjusted behaviors related to accessing healthcare services and household emergency preparedness (EP).

The Family Adjustment and Adaptation Response (FAAR) model describes how families adapt to major adversities or stressful experiences. FAAR illustrates the process families engage in when facing a crisis, and involves four main constructs: (1) *capabilities* (resources and coping), (2) *demands* (stressors and strains), (3) *meanings*, and (4) *family adjustment/adaptation*. Family adaptation can be positive, characterized by positive physical/mental health of the family unit, or negative, characterized by an imbalance of family functioning, or the achievement of balance for the family at the price of deterioration of individual family member health (Patterson, 1988, 2002). The FAAR model has described family stress and coping during crises such as diagnoses of disability/disease, unemployment, or food insecurity (Inhestern & Bergelt, 2018; Maitoza, 2019; Weiss et al., 2015; Younginer et al., 2015). Recent studies have used family stress theories to examine family experiences during the COVID-19 pandemic. Such studies have identified significant stressors to families arising from the pandemic, such as physical/mental health concerns, economic stress, marital conflict, and challenges in homeschooling, and provide a basis for interpreting how families coped with these stressors (Weaver & Swank, 2021; Wu & Xu, 2020).

2 | METHODS

2.1 | Participants and procedures

This study used a qualitative descriptive design. This approach provides a comprehensive, descriptive summary of experiences from the viewpoint of the participants (Sandelowski, 2000). Data collection occurred via small group discussions held in February and March 2021, 12 months into the COVID-19 pandemic in Hawaii. The study was conducted at this time because some restrictions on gatherings had been lifted and preschools were allowed to reopen with limited occupancy. The study used purposive sampling with snowball technique (Parker et al., 2019). Five individuals whose children were enrolled in a university daycare center were first invited to participate via email, eight other participants were then referred by the initial participants, for a total of 13 participants. Inclusion criteria included being (1) a parent of a preschool-aged child, (2) 18 years or older, (3) a Hawaii resident, and (4) an English speaker. Participants received information sheets explaining the study, and provided oral and written consent to participate. Participants received a $20 gift card for their participation. This study was reviewed and approved as exempt by the University of Hawaii Institutional Review Board.

TABLE 1 Semi-structured interview guide

Have you or your family had to change any of your everyday behaviors as a result of the COVID-19 pandemic? If yes, can you describe it?
Has the COVID-19 pandemic had any impact on you or your family's health? If yes, can you explain?
Can you explain how the COVID-19 pandemic has impacted you and your family on a social level in terms of your family, friends, and other people you interact with?
Has the physical environment in the community where you live changed as a result of the COVID-19 pandemic? If yes, can you describe the new change?
Has your employment/livelihood been impacted by the COVID-19 pandemic? If yes, can you explain?
Has your/your family's ability to access health care and other essential services been impacted by the COVID-19 pandemic? If yes, can you explain how it has been impacted and how this has affected you?
How have policies related to social distancing and other government or workplace policies concerning COVID-19 impacted you or your family?
How has the COVID-19 crisis impacted your family's preparedness for disasters?

Participants completed a questionnaire that recorded information regarding age, education, race/ethnicity, household information, emergency preparedness, and healthcare access behaviors. Five small group discussions were conducted, each involving 2–3 participants per session. Each discussion lasted 45–60 min. Discussions were conducted by telephone or web-conferencing to adhere to restrictions on gathering. Each discussion was led by the same researcher and followed a semi-structured script with guiding questions and follow-up probing questions (Table 1). Discussions were audio-recorded. Two researchers transcribed the audio-recordings. Procedures were repeated until data saturation was reached.

2.2 | Data analysis

Demographic data were entered into MS-Excel for descriptive statistics. Qualitative data were analyzed using thematic analysis procedures (Nowell et al., 2017). First, three researchers concurrently reviewed transcripts independently to familiarize themselves with the data. Each then conducted initial coding. Researchers then gathered to compare codes. Where differences in coding were encountered, they were discussed and mutually resolved. Coded data were then sorted and collated into themes. Themes and subthemes were refined and named to reflect aspects of the data they captured. Researchers then generated a report that provided an account of the data within and across themes.

TABLE 2 Participant characteristics ($N = 13$)

	n	(%)		*n*	(%)
Gender			**Age range**		
Female	13	(100)	36–45	12	(92)
Male	0	(0)	46–55	1	(8)
Education			**Area of residence**		
Associate	1	(8)	Urban	6	(46)
Bachelor	3	(23)	Suburban	5	(38)
Graduate	9	(69)	Rural	2	(15)
Race/ethnicity			**Living arrangement**		
Caucasian	2	(15)	House	5	(38)
Filipino	1	(8)	Townhouse	3	(23)
Japanese	5	(38)	Apartment	5	(38)
Chinese	2	(15)	**Number in household**		
Other	3	(23)	Three	5	(38)
			Four or more	8	(62)

2.3 | Trustworthiness

Trustworthiness of the study was enhanced through various elements related to credibility, dependability, confirmability, and transferability (Lincoln & Guba, 1985; Nowell et al., 2017). Credibility was supported through inclusion of diverse participants and use of a flexible question guide allowing participant-driven discussion. Dependability was ensured through regular research team meetings to discuss emerging findings and study processes. Confirmability was supported by having each researcher independently conduct initial coding transcripts and peer-debriefing to assure emerging themes were supported by data. Transferability was supported with strategies including purposeful sampling according to the study criteria, and by providing a description of the context of participants' experiences.

3 | RESULTS

3.1 | Participant characteristics

3.1.1 | Demographics

All participants were females with ages ranging from 36 to 55 years. Five (38%) participants identified as Japanese, one (8%) as Filipino, two (15%) as Caucasian, two (15%) as Chinese, and three (23%) as "Other" (Taiwanese, Thai, Mixed). One participant (8%) had an associate's degree, three (23%) had a bachelor's degree, and nine (69%) had graduate degrees. Participant characteristics ($N = 13$) are summarized in Table 2.

3.1.2 | Healthcare-seeking behaviors and household EP

Table 3 summarizes participants' healthcare-seeking behaviors and household EP characteristics. Approximately half of the participants ($n = 7$, 54%) reported no change in how often they saw a healthcare provider in 2020 compared with the previous year; 46% ($n = 6$) reported fewer visits. Two-thirds ($n = 9$, 69%) reported no change in how often their children saw a healthcare provider; three (23%) participants reported fewer visits; one (8%) reported more visits. Most participants ($n = 12$, 92%) received the flu vaccine in 2020. Three-quarters ($n = 10$, 77%) of participants reported that all household members had received the flu vaccine; two (15%) participants were the only household member who had received the flu vaccine; one participant (8%) reported no one in her household had received the flu vaccine. Most

TABLE 3 Participants' healthcare-seeking behaviors and household emergency preparedness characteristics ($N = 13$)

	n	(%)
How often did you see a health care provider in 2020 compared with previous years?		
More often	0	(0)
Less often	6	(46)
No change	7	(54)
How often did your child/children see a health care provider in 2020 compared with previous years?		
More often	1	(8)
Less often	3	(23)
No change	9	(69)
Received a flu shot in 2020		
Yes	12	(92)
No	1	(8)
Child/children received a flu shot in 2020		
Yes	10	(77)
No	3	(23)
Proportion of household members flu vaccinated		
All	10	(77)
Some	2	(15)
None	1	(8)
Received training in EP		
Yes	3	(23)
No	10	(77)
Essential worker in the household		
Yes	9	(69)
No	4	(31)
Level of household EP before the COVID-19 pandemic (on a scale of 0–10)		
Low (0-3)	3	(23)
Mid (4-6)	3	(46)
High (7-10)	4	(31)
Level of household EP currently (on a scale of 0–10)		
Low (0-3)	1	(8)
Mid (4-6)	7	(54)
High (7-10)	5	(38)

Abbreviation: EP, emergency preparedness.

TABLE 4 Themes and categories

Themes	Categories
Stressors due to the COVID-19 pandemic	Increasing demands - Shifts in employment - Shifts in childcare - Shifts in routine household responsibilities Rapidly evolving situation, juggling uncertaintyFear, heightened perception of risk
Family coping and resources	Balancing work and childcare Family bonds Social support Community resources
Meaning of the COVID-19 crisis to the family	Focusing inward Perception of wellness
Family adaptation patterns	Adapting to a new normal Adaptations to healthcare-seeking behaviors Household emergency preparedness adaptations

participants ($n = 10$, 77%) had not received any EP training. Most participants ($n = 9$, 69%) had at least one household member considered an essential worker. Participants rated their household's EP currently and before the pandemic (where 0 = completely unprepared and 10 = extremely well prepared). The median rating before the pandemic was 5.0, compared to the median rating of 6.0 at the time of the study.

3.2 | Qualitative analysis

Four overarching themes emerged from the qualitative data: (1) stressors due to the COVID-19 pandemic, (2) family coping and resources, (3) meaning of the COVID-19 crisis to the family, and (4) family adaptation patterns. Table 4 summarizes themes and categories, which mapped to the domains of the adaptation phase of the FAAR model (Patterson, 2002).

3.3 | Stressors due to the COVID-19 pandemic

3.3.1 | Increasing demands

Participants expressed feeling overwhelmed with the number of demands placed on them daily. Demands were related to shifts in employment, childcare, and routine household responsibilities.

3.3.2 | Shifts in employment

Participants experienced shifts in employment that were stressful, including increases in hours or responsibilities, decreases in income, working from home, or losing employment. One participant stated: *"The stress level for work is up… I'm constantly working… I don't feel like I ever have a break."* Another person said, *"During COVID, my office had a reduction of two staff members… We all get more work. There's definitely increased responsibilities for me."* One participant described leaving her job due to the stress of balancing childcare and work: *"it just ended up being too much for me, so I resigned."* Another major source of stress was how the pandemic had impacted the job market and future planning. One participant said, *"My number one concern for me right now… we don't know where we are going to go…"* Another participant said, *"My husband was going to retire last summer… but that job was affected by COVID."*

3.3.3 | Shifts in childcare/schooling

All participants experienced stress related to changes to childcare/schooling. Participants expressed constant pressure to make decisions that weighed their child's social development against the risk of exposure to COVID-19: "*I pulled my son out of daycare… I paid for him to be enrolled but didn't send him. It's a struggle between lacking social interaction versus balancing his health."*

Many participants felt bad about keeping their children isolated: "I feel kind of guilty… [my daughter] wasn't seeing any children… or doing anything other than being home." Another said, "My poor son hasn't been to the zoo, aquarium, or any kind of educational environment outside of school for more than a year."

3.3.4 | Shifts in routine household responsibilities

Participants made major adjustments to their daily schedules and routines that were very stressful. One participant explained the feeling of relentlessly having to manage everyone's time: *"You're with the kids trying to make decisions constantly about whether to stick them on the iPad to get your work done, or attend to them because that's part of your job as a parent… getting dinner ready, getting them to bed… we have to be planned and structured about everything."* Participants described spending extra time preparing meals, which was perceived as a burden because it took time away from other important tasks: "*The hours of preschool were reduced which impacted our workdays. And they stopped offering lunch… so now I'm packing lunch everyday…"* Another stated: *"Cooking… has been a big impact on our family. Eating at home every night and then packing lunches for the kids everyday… that's something we've definitely felt in terms of time management."*

3.3.5 | Rapidly evolving situation, juggling uncertainty

Juggling the frequent changes and uncertainty caused by the changing situation of the pandemic led to negative feelings. One participant explained that constantly attending to many competing priorities was taxing: *"Mental health-wise, I felt it was super stressful. I was trying to figure out how to have meetings, how to manage my son, how to make sure that my*

daughters were engaged… and just trying to get my work done at the same time…" Restrictions on gatherings and fear about infection severed participants from their culture and ability to worship: *"I normally go to Thai temples but because of COVID I don't go anymore… that's impacted me because I want to cultivate that culture with [my child]."*

3.3.6 | Fear, heightened perception of risk

A major stressor shared by participants was a fear about getting sick with COVID-19. Participants shared how routine child illnesses in the past had now become more worrisome: *"I've been super hypersensitive about anything that comes up. Like if it's a runny nose… is it COVID? Hypersensitivity for washing hands and sanitizing…"* Fear of infection permeated the decisions that parents made. Participants always remained cautious, weighing activities against the risk of exposure. One participant described it as always "*figuring out the… 'Calculated risk' of everything."* Participants felt overly worried about spreading the virus to vulnerable family members: "*my parents were at my house constantly… I hope I don't expose them… What if something happened?"*

3.4 | Family coping and resources

3.4.1 | Balancing work and childcare

Participants described various ways they coped with the piling up of demands during the pandemic. Those working from home described strategies to cope with balancing work responsibilities, childcare or schooling, and household chores. Some participants strictly managed their limited time. One participant developed a household schedule with her spouse to adjust to working at home with children, stating *"in the beginning… we had to create a schedule, where we could pick shifts to cover watching [our daughter] and working."* Other participants discussed managing limited household space: *"You look at your home differently. Your home space is now your office, the only place you are all day. "*

For those unable to work from home, balancing employment and childcare required new approaches: "I got permission to take my daughter to the workplace. That was hard because she… wants to play. I had to watch my kid and at the same time take care of my customer." Another participant left her job to focus on caring for her children: "I resigned… I'm happy with that decision… I can be home with the kids and feel a little bit more balanced… it feels good."

3.4.2 | Family bonds

Coping with the stress of the pandemic brought family members closer together. Participants' relationships with their spouses evolved, highlighting a need to work together to balance all the competing household demands: *"We've had to figure out a new way of life, to teamwork… It forced us to dig deeper into our marriage and our relationships to depend on each other and grow as a family."* Participants also shared how their children bonded: *"My sibling boys are forced to spend all day everyday together… it really strengthened their relationship."*

3.4.3 | Social support

Restrictions on public gatherings, school closures, and concerns regarding infection greatly limited the social interaction that parents and children experienced. Participants formed new social support systems with a limited number of people outside of their households, using the term 'bubble' to describe these small social groups. Members of their bubbles were extended family members, or other trusted families that shared similar goals. Bubbles formed out of recommendations from preschool staff, who suggested that participants maintain interactions with other families enrolled in their child's preschool: *"We keep it to the daycare group bubble because it's a lot safer… We obviously have a trusting relationship where everybody is invested in staying healthy because otherwise the daycare is going to close down."* Other social bubbles were formed by groups of parents who were working from home: *"Out of necessity, we started a 'speakeasy preschool.' when school closed… a little bubble with their classmates… Every day someone else would take all the kids to their house… They're still the only people we see."*

Participants expressed a longing for the type of group interactions they used to have but still prefer to avoid larger gatherings: *"I miss the big groups that we used to have… I would feel irresponsible doing something like that [now]."* Though the relationships parents maintained were less in number, many described these relationships as deeper: "*Now I have very few people that I spend time with. So, we're close."*

3.4.4 | Community resources

Participants relied on various community resources to cope with the stressors brought on by the pandemic. One participant explained how she relied on telehealth services provided by their child therapist to help cope with their child's behavioral issues. Public policy changes enacted in response to the pandemic allowed participants to receive social service benefits they were not eligible for in the past, such as unemployment insurance or subsidized childcare: *"We received [preschool tuition] assistance and it was a big deal for us. The pandemic increased our access to social services we wouldn't have been able to get before."*

3.5 | Meaning of the COVID-19 crisis to the family

3.5.1 | Focusing inward

The COVID-19 pandemic prompted participants to focus inward on themselves and their families. Due to the restrictions in their movements and exchanges with other people, participants felt that their world had gotten smaller: "*My world has shrunk tremendously."* Another participant said, "*It's just us and the kids, really nothing else, nothing else."*

Another participant remarked on her physical surroundings, *"We're just much more restricted right now. We spend most of our lives in our apartment, and that just sums it up."*

3.5.2 | Perception of wellness

Participants felt changes to their lifestyle brought on by the pandemic impacted their health and wellness. COVID-19 restrictions resulted in changing patterns relating to eating habits or physical activity. Some participants felt less healthy: *"We used to go to the beach, or hiking, or the park. Now we don't have the motivation… COVID made me lazy."* Conversely, other participants felt that their family was healthier: *"We actually exercise more than before. We're healthier than ever."* Many participants said they were sick less often after the pandemic started since children are no longer going to daycare: *"When [my son] started daycare, I was probably sick eight or nine months of the year with colds that he would catch at daycare. Now, he's been less sick, which has been great."*

3.6 | Family adaptation patterns

Participants reflected on new routines and patterns they had adopted. They discussed feelings about their 'new normal,' and also described changes to practices related to seeking healthcare services and preparing for emergencies.

3.6.1 | Adapting to a new normal

After nearly a year since the beginning of the pandemic, participants were adapting to their new reality: *"Things have settled into place… I still get frustrated by the fear and grief… but I feel like everything's okay."* Others reflected on their family experience, sharing feelings of gratitude or happiness regarding aspects of their lives: *"I am grateful that I was able to work and keep my job, even though it was very isolating…. it could have been a hundred times worse."* Another person said, *"in the beginning… I was super stressed and overwhelmed…It's weird that this has become the new normal and I can say I'm happy."*

3.6.2 | Adaptations to healthcare-seeking behaviors

Participants explained how the pandemic influenced their interaction with healthcare providers. In some cases, access to healthcare was perceived to be better due to changes providers made to enhance patient safety, such as spacing out scheduling and expanding telehealth services: *"I kept all of my doctors and dental appointments. My providers have taken safety into consideration… We have done telehealth too, and I texted my doctor, so I don't feel like I've missed anything though it has been different."* Participants stated that many of the changes made by healthcare providers and facilities made them feel safe and were greatly appreciated. Shorter wait times for appointments were frequently commented on: "*They put you into a room as soon as possible. I like it because you get seen faster… It expedites visits."*

Participants who accessed healthcare less frequently during the COVID-19 pandemic did so out of an abundance of caution, avoiding seeking health care unless it was deemed critical. Routine check-ups, screenings, and dental checks for themselves and their children were postponed. Despite delaying routine visits, participants did not perceive the missed visits had influenced their health or their children's health: *"If it wasn't something that was deemed crucial or significant, we pushed things off… I don't think it had too much of an impact on our health."*

3.6.3 | Household EP adaptations

Participants explained that they had not changed their EP behaviors due to the COVID-19 pandemic. Many participants felt that they needed more information on how to better prepare their families for pandemic situations. This was true even among households that were well-prepared for natural disasters: "*Obviously, we have stuff ready [for natural disasters] like water and flashlights and non-perishable foods. But for a long-term pandemic disaster? I don't even know how to prepare."* The most common adjustment made to EP behaviors was to add medical items to emergency stockpiles, such as face masks, hand sanitizer, soap, cleansing wipes, and over-the-counter medications: *"I now stock medication, like Children's Tylenol and Tylenol so I won't have to go to the store in a hurry. I've increased my medical preparedness."*

When asked what plans their family had if someone were infected with COVID-19, participants provided a range of responses. One participant said, "*The plan is to… reduce your exposure and don't get sick. When someone gets sick, then deal with it."* Some participants explained that they had family discussions about the challenges of quarantining in their homes. The most common barrier described was a small living space. A participant who lived in a one-bedroom apartment said, *"If one of us has COVID-19, how could we quarantine ourselves…? I don't have a solution that could work well in our home."*

All participants had either started the COVID-19 vaccination series or had expressed intent to get vaccinated. Two participants were pregnant, and expressed concern about vaccine safety for pregnant women. One said, *"Since I'm pregnant, [I'm] basically trying to make a decision with my obstetrician. We're not at the point where I'm comfortable about taking the shot."* Most participants expressed being in favor of vaccinating their children, but would seek their pediatricians' guidance. Reasons why participants would hesitate to vaccinate their children included concerns regarding severe side effects. One participant questioned whether a vaccine would be necessary for children if there were a high vaccination rate in the state: "*If we had herd immunity and the incidence of COVID are low, I don't know if it's worth giving our children [the vaccine]."*

4 | DISCUSSION

This study sought to bring to light the experiences of parents of preschool children in Hawaii during the COVID-19 pandemic.

Discussion of this study's findings is organized according to the domains of the FAAR model.

4.1 | Demands

The COVID-19 pandemic and public health policies enacted to mitigate the spread of disease resulted in a crisis state for some families with preschool children. Parents felt overwhelmed by stress resulting from multiple demands confronting them all at once. Chief among these were major changes to employment. Stressful changes to the work environment experienced by participants in this study reflected trends in the state. One-third of Hawaii residents experienced reduced work hours, 20% had lost jobs, and 11.2% experienced increased work hours (Buenconsejo-Lum et al., 2021). Feelings of fear and a heightened perception of risk arose due to the uncertainty surrounding the new infectious disease, contributing to participants' stress levels. Such feelings may have contributed to the mental health strain experienced by some of this study's participants. Fear and a heightened sense of risk can lead to hypervigilance, which has the effect of raising anxiety in healthy individuals and persons with preexisting mental health conditions (Perrin et al., 2009).

4.2 | Capabilities and family meaning

Families coped with the crisis by developing new family routines, relying on internal and external family resources, and changing how they perceived the impact of the COVID-19 pandemic on their families. Positive aspects of the COVID-19 pandemic were found among participants of this study, including strengthened familial bonds and relationships with other families. Positive impacts of an infectious disease outbreak on social connections have been reported, such as an increased cohesion among family members or social groups (Perrin et al., 2009). While this study found mostly positive changes to the nature of relationships within the family, a similar study conducted earlier in the pandemic among parents with young children found that participants' feelings about their spouses included resentfulness and bitterness (Weaver & Swank, 2021).

4.3 | Outcomes

4.3.1 | Mental health strain

The COVID-19 pandemic has been a period of high uncertainty, especially for mothers of young and adolescent children, who have had to spend extra time, energy, and resources to manage uncertainties to ensure their family members' safety (Walker et al., 2021). Participants experienced high levels of uncertainty throughout the rapidly evolving pandemic, resulting in a strain on their mental health. Disconnection from extended family members, friends, spiritual communities, and other communal networks, may also have contributed to the mental health strain described among participants. Increased levels of mental distress have been reported among parents in the US (Patrick et al., 2020). Hawaii residents have also reported experiencing anxiety, depression, or other negative feelings as a result of the COVID-19 pandemic (Buenconsejo-Lum et al., 2021). While the long-term impact on mental health of the COVID-19 pandemic has yet to be fully understood, it is important that nurses, healthcare providers and other professionals providing services to families with young children be increasingly sensitive to the immense stress that the pandemic has had on parents, and the strain this may have caused on family relationships.

4.3.2 | Healthcare access patterns

The COVID-19 pandemic did not result in major disruptions to healthcare services and access among participants of this study. Individuals who had delayed routine visits reengaged with healthcare providers once they felt that sufficient safety precautions were in place. Enhanced access to telehealth and shorter wait times were welcomed by participants. Increased use of telemedicine may be one of the positive outcomes of the pandemic, with the highest usage among patients 20–44 years of age (Mann et al., 2020). Patients consider telemedicine easy to use and as valuable as in-person visits, and without telemedicine visits, they would have missed medical appointments (Smith et al., 2021). Such qualities will ensure that telemedicine will remain an important means of accessing healthcare, especially for parents of preschool-aged children. Going forward, facilities should bolster capacity to deliver telehealth services to ensure adequate access for all families. Outreach to families who are less technologically savvy to assess for telehealth access barriers is another important effort that can be undertaken.

4.3.3 | Household EP patterns

Participants in this study generally regarded COVID-19 as a serious issue, reflecting results from a survey of Hawaii residents (Buenconsejo-Lum et al., 2021). The COVID-19 pandemic had minimal influence on the household EP behaviors of participants of this study. Pandemic preparedness was viewed as a separate and distinct issue from EP for natural disasters, such as hurricanes or tsunamis. Participants were not clear on what would constitute a household 'pandemic preparedness' plan. None of the participants had developed concrete plans for quarantine/isolation. Major barriers existed to carrying out quarantine in their homes, specifically small living spaces. This reflects findings from a survey which found that half of Hawaii residents lack space in their home for quarantine/isolation (Buenconsejo-Lum et al., 2021). One year after the beginning of the COVID-19 pandemic, Hawaii households were still unclear how to quarantine/isolate if a family member were infected. Quarantining sick individuals in a household is one strategy for preventing the spread of infection to other family members. Public health education campaigns in Hawaii highlighted the methods and reasons for conducting quarantine within

a household; however, these efforts do not seem to have been effective. Greater public awareness may be necessary to prompt parents of young children to develop plans for safely quarantining family members in their homes.

4.4 | Implications for nurses caring for families with young children

Parents of young children experienced a major strain on their mental health during the COVID-19 pandemic. Nurses who care for parents of young children can initiate crisis intervention strategies and make linkages to mental health services to help to protect clients' mental health during extremely stressful situations such as pandemic disease outbreaks or natural disasters. Evidence-based strategies include managing media consumption to minimize exposure to news that elicits distress, accessing information from reliable sources that encourage practical steps parents can take to protect themselves and loved ones, and limiting information seeking to once or twice a day. Also, encouraging parents to help children to find positive ways to express their feelings, and maintaining familiar routines or establishing new ones are also important (Brymer et al., 2020; World Health Organization, 2020).

Nurses can partner with other healthcare providers to encourage greater EP among families with preschool children. Nurses are trusted sources of health and safety information and can leverage such trust to encourage EP behaviors. Providers can assist families in preparing for emergencies by encouraging regular vaccinations, stockpiling emergency supplies, and maintaining a family emergency plan (CDC, 2020).

Nurses who work at the systems/policy level can advocate for stronger social safety nets to support parents serving as caregivers for their children. Parents of young children took on a heavy burden of multiple conflicting responsibilities, simultaneously maintaining their households while being responsible for their children's education while schools were closed. Parents also experienced changes in working conditions, including decreases in salary or loss of employment. Such changes impacted parents' ability to provide a safe, nurturing environment for children to grow and develop. This study showed how expanding eligibility to preschool programs enabled parents to continue working and provide income to support their household. Providing expanded social support services to parents of young children can empower families to support themselves, ultimately contributing to the long-term health and wellbeing of family members.

4.5 | Limitations and strengths of the study

This study was limited by its small number of participants, many who had children attending a university-affiliated preschool. The average education level of participants was higher than the general population in the state. The sample's racial/ethnic make-up was diverse but not fully representative of all groups in the state. Participants were females living on Oahu, the island with the highest concentration of health/social services. Future studies can address these limitations by including a larger, more geographically diverse sample with characteristics more representative of the general population. Also, small group discussions were conducted by distance via phone or web-conferencing. Results may differ if done in-person. Despite these limitations, this study provides valuable insight into the experience of Hawaii parents with preschool children during the COVID-19 pandemic, and robust evidence to support nursing interventions and programs or policies targeting families with young children during large-scale disease outbreaks or other disasters.

5 | CONCLUSION

The COVID-19 pandemic had an immense impact on families with young children. This study uncovered stressors experienced by families of preschool children in Hawaii during the COVID-19 pandemic and ways families adapted to the public health crisis. It is important to understand the unique needs of parents with preschool-aged children, as well as how perceptions regarding vaccines, risk, and emergency preparedness have changed due to the COVID-19 pandemic. Such information can inform public policy and outreach efforts to support families during public health emergencies.

CONFLICT OF INTEREST

The Authors declare that there is no conflict of interest.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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