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Promoting Equity and Resilience: Wellness Navigators' Role in Addressing Adverse Childhood Experiences

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Abstract

Objective: Adverse childhood experiences (ACEs) have demonstrable negative effects on long-term physical and mental health. Racial and ethnic minority children disproportionally experience ACEs due to the impacts of structural inequality and discrimination, which could drive health disparities. Pediatric settings offer an opportune context to address ACEs and improve health equity, and to link families to the necessary resources to promote resilience. Wellness navigators (WNs), who can reflect patients' cultural, linguistic, and other shared characteristics, have the potential to improve patient care and integrated behavioral health services to mitigate the public health impact of ACEs. In the current study, bilingual and bicultural WNs helped to deliver an ACEs screening and response to predominately Latinx patients in a pediatric service setting.

Methods: Quantitative data on referrals made by WNs and qualitative interviews were analyzed to understand the role of WNs in ACEs screening.

Results: Among families (infants and caregivers) that screened positive for ACEs, WNs addressed social determinants of health and, based on individual needs assessments, made referrals to community resources in over half of the cases. Insurance, childcare, and housing were the most frequent referral sources. WNs supported caregivers in initiating services with 94% of the referrals that were made. Qualitative interviews with medical providers and caregivers underscored WNs' role in the ACEs screening process. Implications for ACEs screening, trauma-responsive pediatric care, and integrating WNs into an integrated behavioral health team are discussed.

Adverse childhood experiences (ACEs), including maltreatment, family violence, caregiver instability, and community violence, have been linked with negative long-term outcomes, including the leading causes of mortality, such as heart disease, stroke, cancer, and other chronic health and mental health conditions (Bellis et al., 2019). Furthermore, ACEs are extremely prevalent; current estimates suggest that almost 60% of the United States' population has at least one ACE (Merrick et al., 2018). Structural inequalities, leading to experiences of childhood trauma, stress, poverty, discrimination, and exposure to community

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Partial data from this project will be disseminated in an oral presentation at the International Society for Traumatic Stress Studies on November 14–16, 2019.

violence, can disproportionately impact people of color, increasing their risk for exposure to ACEs (Liu et al., 2019). As such, higher ACEs exposure has been identified as a potential mechanism leading to greater health disparities for racial and ethnic minority groups (Alegría et al., Loder, 2015; Liu et al., 2018).

To address the large-scale public health impact of ACEs and address health disparities, attention has been placed on how to best identify, prevent, and treat the negative sequelae associated with ACEs (Bethell et al., 2017). Pediatric clinics have been identified as an ideal setting to screen for and address ACEs, given that pediatricians are viewed as trusted care providers and are able to track child development from infancy to adolescence (AAP, 2014). Research and practice guidelines have not yet established the most appropriate ages to conduct ACEs screening. However, some advantages have been identified for screening infants and their caregivers for ACEs (Kia-Keating, Barnett, Liu, Sims, & Ruth, 2019). First, infants and caregivers interact frequently with pediatricians within the first year of life, making it a time that allows for regular intervention (Mendelsohn et al., 2011). Infancy is a sensitive period, in which exposure to ACEs can have profound impacts on long-term outcomes, making prevention efforts imperative (Dunn et al., 2019; Hambrick et al., 2018). Furthermore, it may be beneficial to screen caregivers of infants, given compelling evidence demonstrating that caregiver ACEs significantly impact youth mental health outcomes (Schickedanz, Halfon, Sastry, & Chung, 2018).

There is an increasing interest in and, in some places, public policy mandating ACEs screening. For example, in the state of California, a recent law allows for reimbursement for ACEs screening in a Medi-Cal population (Udesky, 2019). These implementation efforts are occurring in the context of ongoing concerns about how to best screen for and respond to ACEs (Finkelhor, 2018). Specifically, pediatricians have limited time to address ACEs screening given the multitude of issues they address at appointments and there is not currently an empirically supported gold standard response for positive ACEs screening (Biglan et al., 2017; Finkelhor, 2018). Furthermore, research on screening for ACEs in primary care has been limited to date. In a scoping review on ACEs screening in adult populations, the authors only identified 15 articles that were published between 1997 and 2018, which investigated the feasibility, acceptability, and implementation of routine screening (Ford et al., 2019). Few studies have reported on ACEs screening amongst children (Kia-Keating et al., 2019; Selvaraj et al., 2019). Service users have reported that ACEs screening is acceptable if it facilitates access to resources; however, limited information has been provided about follow-up to screening (Ford et al., 2019). This paucity of research highlights the importance of evaluating how ACEs screening impacts referrals for children and families.

Moreover, it is critical to recognize the barriers to access and utilization of mental health services for communities of color, and in particular, Latinx families (Kapke & Gerdes, 2016; Larson, Chapman, Spetz, & Brindis, 2017). Some important factors have been identified, including cost, lack of health insurance, language, and cultural appropriateness of treatment (Hodgkinson, Godoy, Beers, & Lewin, 2017). Thus, it is important to take into consideration the setting where services are offered, and how providers might offer cultural and linguistic bridges within contexts where families have already established accessibility, familiarity and attendance. Accordingly, integrated behavioral health teams have begun to look to WNs (i.e., family navigators, patient navigators) as potentially offering a distinctive and valuable passageway to effectively address ACEs (Srivastav, Fairbrother, & Simpson, 2017). WNs, consistent with community-health workers, are individuals without formalized health or mental health training with the primary goal of providing culturally and linguistically appropriate linkages to health and social services (Barnett, Lau, & Miranda, 2018; Olaniran, Smith, Unkels, Bar-Zeev, & van den Broek, 2017). Navigation is an evidence-based approach that is focused on improving access to health services by eliminating barriers to care, with a specific emphasis on reducing racial, ethnic, and socioeconomic disparities (Ali-Faisal, Colella, Medina-Jaudes, & Benz Scott, 2017; Broder-Fingert et al., 2019). While the evidence-base for navigation was established in cancer care, the model has recently been applied to behavioral health needs, including receiving a timely diagnosis for autism spectrum disorder (Broder-Fingert et al., 2018) and therapy services for maternal depression (Silverstein et al., 2018).

Various benefits exist to including WNs in pediatric care responses in the context of ACEs screening for diverse, ethnic minority children and families. First, WNs are more likely to come from the same cultural background as patient populations they serve, which facilitates their ability to provide a cultural bridge and linguistically appropriate care for patients and address structural, cultural, educational, and logistical barriers to seeking services (Barnett et al., 2018). Secondly, they are able to task share within integrated behavioral health teams, allowing pediatricians and mental health providers to focus on services that require specialized training, while WNs' scope of practice is to address disparities by providing logistical support to manage complex health care systems and address other social determinants of health, such as food and housing security (Bethell et al., 2017; Olaniran et al., 2017). It is important to understand the core components of navigation to replicate successes in disparity reduction. For example, core components for navigation in offering care for autism spectrum disorders have been identified and include linguistic and cultural brokering, contact with family to identify barriers to accessing services, emotional support, and care coordination to appropriate community-based services (Broder-Fingert et al., 2019). The role of WNs is likely to differ based on the health issue being addressed and further inquiry is needed into the roles they would have in ACEs screening and response.

Current Study

The current study focused on the role WNs play in ACEs screening and response for low-income, primarily Latinx families within four medical clinics that are part of a system of federally-qualified health centers (FQHCs), which serve 22,000 low-income, adult and child patients a year, the majority of whom have Medi-Cal (56%) or are uninsured (28%). WNs are part of the standard of care for this system of FQHCs to address social determinants of health in the patient population. However, under the existing payments systems, their services are not reimbursable by insurance. Their positions are funded by grants, which include private foundations, the community hospital, the Department of Health Care Services of the State of California, and Federal funding sources such as Title X and the Health Resource Services Administration.

A community-academic-medical partnership was established to plan and implement the Resiliency Project Study, with representation from the FHQC (i.e., a lead WN, pediatrician, and administrator), a local children’s mental health provider that focused on trauma and resiliency, and university-based researchers. All project activities were also informed by a larger advisory board, which included youth-serving organizations, public health leaders, funders, and other key stakeholders. Furthermore, the clinics received additional training from the National Pediatric Practice Collaborative (NPPC) on Adverse Childhood Experiences. Implementation of ACEs screening and response was developed to be consistent with Trauma-Informed Care principles (Oral et al., 2016). According to the Substance Abuse and Mental Health Services Administration, organizations that are trauma-informed, “seek to realize the widespread impact of trauma and understands potential paths for recovery; recognizes the signs and symptoms of trauma in clients, families, staff, and others involved with the system; and responds by fully integrating knowledge about trauma into policies, procedures, and practices, and seeks to actively resist re-traumatization” (SAMHSA, 2014, p. 9). Furthermore, it is important that trauma-informed organizations provide patient care that is culturally sensitive and fosters strengths and resilience.

The Resiliency Project included a randomized-control trial (RCT) testing the effectiveness of tiered intervention options in response to ACEs screening within pediatric practice. As wellness navigation was incorporated in all intervention groups tested in the RCT, the current study focused on how WNs impacted the screening efforts and the community referrals that were requested to meet the needs of the patients served. Furthermore, to understand and inform implementation across four clinics, qualitative data was collected about the feasibility and acceptability of ACEs screening and responses. Specifically, the current study addressed the ways in which integrating WNs into trauma-informed care can increase the culturally competent coordinated behavioral and physical pediatric health care, and the reduction of systematic barriers to care, particularly in terms of impacting social determinants of health for traditionally marginalized populations.

Participants

In total, 249 infant and caregiver dyads were screened for ACEs as part of their standard care. Infants were between the ages of 3 months 23 days and 11 months 5 days ($M = 5.19$ months, $SD = 1.86$) and 80.8% were Latinx. Caregivers and infants were eligible for inclusion in the study if caregivers had two or more ACEs or their child had at least one ACE and the caregivers spoke English or Spanish. Pediatricians then discussed the impact of toxic stress and asked eligible caregivers if they wanted to meet with a WN to receive more information about interventions and other community resources. Of those screened, 126 (51%) caregiver-infant dyads met inclusion criteria, and 79% ($n = 99$) of those caregivers chose to enroll in the study. See Supplement 1 for a flow diagram of screening to enrollment. Of the 99 enrolled dyads, infants had 0.57 ACEs on average (range 0–4) and parents had 4.5 ACEs on average (range 0–17).

Twelve individuals participated in qualitative interviews focused on the acceptability of ACEs screening and response, to inform the implementation scale-up of protocol across four clinic sites. Purposeful sampling was used to select interview participants. All pediatricians (*n* = 3), WNs (*n* = 2), behavioral health counselors (*n* = 1), and lead medical assistants (*n* = 3) involved in ACEs screening implementation at the first two sites were interviewed. The first three available caregivers who completed the follow-up assessments for the RCT were interviewed.

Procedures

Training.

All staff members received training in ACEs and toxic stress, including front desk staff, WNs, medical assistants, and pediatricians. Employees were encouraged to reflect on their own personal experiences of ACEs and to increase their awareness and understanding of ACEs among the population of patients they served. Training included conducting role-plays to practice how to present the questionnaire, ways to respond to the ACE scores of the infant and caregiver within the well-child visit, and a review of mandated reporting requirements and actions if child abuse or neglect was suspected. WNs received additional training about how to identify families needing ACEs screening within the electronic scheduling program. Within the Resiliency Project, they also received specific training and scripts as to how to introduce the study and the in-clinic parenting interventions if participants were randomized into one of these conditions. For additional information about the training program please see [Author].

Screening.

By running weekly reports using the electronic scheduling program at each clinic, WNs identified the need for patient ACEs screening for upcoming well child visits. The ACEs screening took place at the 4-month well child visit, or at the soonest subsequent appointment, as part of standard care. The WNs flagged these appointments for screening and placed the questionnaires in a folder for the medical assistants. At the time of the visit, medical assistants introduced the screener to families in a private location and described it as a *"questionnaire that asks about personal experiences to screen for health risks associated with stress."* Instructions at the top of the screening measures stated, "*Please read the statements below. Count the number of statements that apply to your child and write the total number in the box provided*." Only total summary scores were collected, as opposed to individual item endorsement. This practice was conducted in accordance with the screening standards previously utilized in pediatric screening for ACEs by the Center for Youth Wellness and currently recommended as part of the guidelines for the statewide screening implementation in California (Purewal et. al., 2016; Udesky, 2019). Furthermore, the de-identified ACES screener allows for quick and efficient assessment of exposure to ACEs within the context of a time limited, structured pediatric visit. Pediatricians examined both caregiver and child ACEs total scores. If they did not meet inclusion criteria, the pediatrician still discussed the impact of toxic stress with caregivers, offering the opportunity for future conversations if the caregiver had questions or was ever concerned about their child's exposure to ACEs. If total scores did meet inclusion criteria, the pediatrician referred the family to a WN and provided an opportunity to discuss ACEs, including individual items, although discussion of these items was not required.

Resiliency Project Study.

Once families screened as eligible for the research study, they met with a WN who described the study and conducted the informed consent process. If families were interested in participating, they were randomly assigned to one of the three intervention groups: 1) wellness navigation, 2) wellness navigation plus a clinic-based parenting intervention, 3) wellness navigation plus a clinic and home-based intervention focused on parenting. Every family enrolled in the study was offered wellness navigation, which included referrals to community resources to address challenges they were facing. All procedures for this study were approved by the Institutional Review Board at University of California, Santa Barbara.

Wellness Navigation.

Seven WNs, who were all Latina and bilingual in Spanish and English, provided services in the Resiliency Project. WNs were established employees in the clinic, with experience in enrolling patients in Medicaid, providing community referrals, and chronic illness management. Requirements to be a WN included having a high school diploma with an associate degree (or college experience) along with related education or experience in health care or community education. In addition, WNs underwent training to be certified enrollers for the state Medi-Cal program as well as the Covered California insurance exchange. WNs first explained their role to families in helping to link them to services, and then asked what concerns they had for their family. Families were encouraged to identify the needs they saw as most pressing, which were not necessarily directly tied to ACEs items or total scores. Depending on family needs, WNs offered resources from 62 local community referral sources that fit into the categories of being related to food security (e.g., food bank), clothing, housing (e.g., Section 8 voucher), childcare (e.g., Head Start), utilities, domestic violence (e.g., local shelters), behavioral health and developmental disability services (e.g., community mental health), insurance (e.g., Medi-Cal enrollment), legal support, adult education, and employment.

Measures

Adverse Childhood Experiences Questionnaire-Child and Caregiver Versions.

The ACEs Questionnaire contained ten items related to abuse (i.e., physical, emotional, and sexual abuse), neglect (e.g., physical and emotional neglect), and household dysfunction (e.g., divorce, domestic violence), which were included in the original ACEs study (Felitti et al., 1998), and eight additional items related to adverse community experiences (e.g., discrimination, community violence) during childhood, which were included in the screener from the Center from Youth Wellness (Purewal et al., 2016). One additional item related to exposure to natural disasters was included based on the local context (ACEs screening tools provided in Supplement 2). Caregivers reported a total number of the items they had experienced before age 18, as well as a total number that their infants had experienced to date.

Wellness Navigator Referrals.

An excel spreadsheet of all referral sources was developed, in which WNs tracked every referral they made for a family. For the purpose of this study, a referral was considered to be completed when the family had initiated contact with a resource. For many resources, WNs would complete the referral with a family at the time of the appointment. For example, WNs would enroll families in Medi-Cal and assist families in completing online registration and faxing applications for housing and daycare centers. For services that the family would have to seek on their own, WNs would call caregivers and ask if they had initiated services.

Qualitative Interview Guide.

A semi-structured interview guide was developed to gain insights into multiple stakeholders' perceptions of ACEs screening and wellness navigation services. Questions and prompts related to perceptions of the benefits and challenges related to ACEs screening and response. The interview followed a funnel approach with broader questions asked first followed by more specific follow-up probes (Spradley, 1979). The interview guide for staff started with the question, "*How has screening parents and infants for ACEs impacted the services provided by [clinic name]?"* with follow-up probes related to how it has impacted patient care, their job, challenges with screening, and perceived benefits of screening. Interviewers explained to parents that they were going to ask questions about the ACEs questionnaire that they had completed for themselves and their child, and they were shown the questionnaire to remind them of the questions. Interview questions related to how they felt answering the questionnaire for themselves and their child, along with prompts if anything was "*helpful,"* or "*challenging or unhelpful,"* about screening for and discussing ACEs with their pediatrician. Similarly, questions were asked to staff and caregivers about the benefits and challenges of working with a WN.

Analyses

The study used a mixed methods design (QUANT+QUAL) approach, with a side-by-side comparison of results reported individually and then blended in the discussion (Creswell, 2017). Descriptive statistics of the referrals made and follow-up were analyzed to understand the types of referrals that were most common in response to ACEs screening and the rate of service initiation. Qualitative interviews with caregivers, medical staff, and providers were conducted to elaborate on quantitative findings regarding the role of WN services in response to ACEs screening. Interviews were analyzed using rapid qualitative analysis, which is an ideal approach when information is needed to guide and improve the implementation process (Palinkas & Zatzick, 2018). In this process, qualitative research team members used the interview guides to develop a structured template used to synthesize concise summaries of interview responses, along with examples of rich responses to include as illustrative quotes. Responses were aggregated onto a cross-participant matrix, with topics from the interview guides comprising the columns (e.g., challenges with referral process) and each participant and their role in a row (e.g., pediatrician). This matrix was analyzed to identify cross-cutting themes across participants, and identifying stakeholder-specific (e.g., pediatrician, caregiver) themes (Averill, 2002).

Quantitative Results

Screening.

Out of 267 unique well-child visits among 3- to 12-month old infants at one of four clinics, 93% of infant-caregiver dyads were screened, and 51% had an infant with 1+ ACE and/or a caregiver with 2+ ACEs. Almost every missed screen occurred at the initial implementation of the screening protocol as staff learned how to recognize the need for screening and address timing in introducing the screener. Screening rates were reviewed monthly with the research and medical team and workflow adjustments were made to improve screening rates. Though only total scores were collected, caregivers often disclosed individual items they had endorsed for themselves or their infant to their pediatrician. Notably, in no instance was mandated reporting required. The only infants with disclosed abuse or neglect were already involved in child welfare services and had been placed in foster care.

Wellness Navigator Referrals.

Of the 99 participants, 53% received a referral from a WN, with 541 referrals being made across the 62 different community resources. Wide variability in number referrals received occurred based on family need, so that the range was between 0 to 32 referrals ($M = 5.52$, $SD = 7.93$) per family. The most common referrals related to insurance enrollment, childcare (e.g., daycare and after school programs), and housing (e.g., Section 8 vouchers). See Table 1 for the categories of referrals made and completed. WNs completed referrals with families primarily during the appointment, leading to high completion rates for services that allowed for on-site enrollment or submitting applications as opposed to caregivers initiating services on their own. If referrals were not completed during the appointment, WNs called caregivers to see if they had initiated contact with the service agency. Based on referrals completed on site and caregiver report, 94% of the referrals were completed.

Qualitative Results

Qualitative results expanded on the importance of the WN role in ACEs screening, with a set of consistent themes emerging across the multiple informants, which included medical providers and caregivers. Salient themes related to how WNs impacted the screening process and the overall quality of medical services.

Impact of WNs on screening process.

WNs were identified as being critical members of the team to facilitate the screening process, including making sure that an ACEs screen was collected. As stated by one medical assistant, "*I feel like they are in tune with everything because sometimes I don't have time to look at the set schedule and the wellness navigator might come by and be like 'Hey so there was this patient you scheduled, did you get the screening?*.'" Furthermore, it was discussed how having a WN made screening for ACEs more acceptable for medical providers, since they knew that the families would receive support if they reported a history of adversity. As stated by one pediatrician, "*I think it's all beautiful when I have someone to hand them to*." In turn, providers and caregivers reflected on how the ACEs screening process increased patient awareness of and access to WN services. The WNs noted that the services they provided to families referred for ACEs were similar to the services they provided for other patients in the clinic, but they were more likely to begin to work with families and identify their needs following the implementation of ACEs screening.

A “one stop shop:” WNs help treat the whole person.

Caregivers and providers identified how the WN improved the overall quality of medical care, by increasing the services that were provided within the clinic and making it a “*one stop shop*.” As one behavioral health specialist stated, WNs helped patients recognize, “*We aren’t just here for physical illness. We are here to, you know, figure out other factors in your family’s system that are needed to support your family in a positive way*.” Caregivers reflected on how they appreciated the convenience of meeting in-person with WNs within the medical clinics and the relationships they were able to build with the WNs. Relatedly, multiple providers identified how the WNs became trusted members of the medical team that the families would seek out, who were more approachable because of being from a similar cultural background and being more like a peer to caregivers. In one illustrative example, a pediatrician explained the role a WN took with a Latinx immigrant family following the father’s deportation, “*And the mother had to go get a job and get childcare for all of her children and the first person she called was the wellness navigator, because she really doesn’t have other resources here in the community, she doesn’t have family that [she] can ask for help.”*

Discussion

As increasing attention is placed on identifying and addressing ACEs in pediatric practices, there is a pressing need for empirical studies of screening and interventions that can be used to prevent or protect children from ACEs and their negative sequelae (Kia-Keating et al., 2019). The current study contributes to the scientific literature by examining the role of trauma-informed and culturally attuned WNs in ACEs screening and referral within a pediatric integrated behavioral health setting primarily serving low-income Latinx families. Mixed-methods results pointed to benefits for integrating WNs into ACEs screening in pediatric settings.

The rate of completed screening for ACEs was 93%, suggesting that a successful model of adding an ACEs screening to pediatric settings can be developed through proper training and organizational commitment (Author). Based on qualitative interviews, the WNs played several key roles in the successful rates of screening completion, which were higher than those found in other studies of ACEs screening in pediatric settings, which have ranged from 50 to 60 percent (Marsicek et al., 2019; Selvaraj et al., 2019). First, the WNs helped to identify patients who were due for ACEs screening by running reports on the well child visits and reminding medical assistants to complete the screening. Furthermore, pediatricians may have been more committed to ACEs screening because they knew that they would be able to refer the family to a WN to help respond to family’s needs. Based on these results, task-sharing with WNs, both in terms of conducting the screening and addressing positive screens, appears to be a successful strategy for promoting successful uptake of ACEs screenings within pediatric clinics.

Service linkage has been identified as an important rationale for conducting ACEs screening within medical settings, both from the perspective of the patients and their providers (Dube, 2018; Ford et al., 2019). However, very limited research has identified the referrals that are desired or used by families that screen positively for ACEs (Ford et al., 2019; Glowa et al., 2016). Notably, in this study, families were exceptionally likely to initiate contact with services, with a strikingly high update level of 94% referral completion. Caregivers and providers highlighted a number of potential reasons for the success of gathering and responding to referrals from WNs: first, they noted that WNs created an opportunity for an immediate, warm hand-off during well child visits, so it was both convenient and efficient as a “one stop shop” for both caregivers and providers. Importantly, WNs also had the role of taking a socio-ecological lens in addressing social determinants of health and the contextual variables impacting children and families, such as health insurance enrollment and helping support the psychosocial needs of family members. Furthermore, WNs were able to help families manage complex systems of care by completing and reviewing applications with them. Finally, WNs were able to build trusting relationships with caregivers. These relationships were facilitated by the cultural congruence between WNs and caregivers, their continual support at well child visits, and their responsiveness to the family’s needs.

Another notable finding from the current study was surrounding the types of referrals that were made by WNs. Referrals were determined based on conversations that WNs had with caregivers about the perceived needs of their families. Similarly to another study, we found that the types of referrals that were most frequent amongst families related to social determinants of health, including housing, insurance, and childcare, suggesting that basic needs may be the most pressing for low-income families with histories of adversity (Selvaraj et al., 2019). One concern raised among researchers and practitioners about ACEs screening relates to the potential that it will lead to high levels of referrals to behavioral health services, which could be burdensome on a system unprepared to meet these newly identified needs (Finkelhor, 2018). Interestingly, only 10% of families in our sample received referrals to behavioral health services for the caregivers or other members of the family. It is important to note that families were randomized to prevention interventions that were conducted by an embedded behavioral health provider within the clinic, which focused on improving the caregiver-child relationship to promote resiliency, as part of the larger study. Therefore, fewer behavioral health referrals for the caregivers and other family members may have been needed than they might be in other settings without embedded preventive interventions. In fact, it might be especially important to have referrals for parenting interventions available, as another study on ACEs screening in pediatric practices found that caregivers were most interested in receiving services that improve parenting skills and increase knowledge about ACEs and resilience (Gillespie & Folger, 2017). However, these findings were still surprising in that ACEs screening did not lead to high levels of referrals to intensive interventions to address trauma or other behavioral health needs for the caregivers, as has been identified as a possible predicament of collecting more information (Finkelhor, 2018). Future research needs to continue to identify the impact of ACEs screening on behavioral health referrals, especially in settings that do not offer integrated care services. In line with recommendations from the American Academy of Pediatrics (2014), our results suggest that when planning for responses to ACEs screening, it is important to have an inclusive range of services as potential referrals.

Limitations and Future Directions

The findings of this study need to be contextualized within its limitations. First, qualitative data was collected to inform scale-up from the first two clinics to the second two clinics. Additionally, only three caregivers, who had completed their participation in the trial were interviewed. Therefore, perspectives of staff from other clinics or caregivers who did not finish the intervention were not included, which might limit the representativeness of perspectives. Importantly, though the WNs were able to complete many types of referrals within the appointment, other referral completion relied on caregiver report, such as if they made an appointment for behavioral health, which may not be accurate for a variety of reasons. For example, for social desirability, caregivers may have said they made an appointment when they did not. Furthermore, this study did not track the actual receipt of services, the length of time families remained on waitlists, or the quality and effectiveness of the services provided. To understand how ACEs screening impacts both individual families and systems of care, it is important for future research to track how screening and referral procedures increase demand for services and if there are adequate supplies of resources to meet these demands.

As the majority of referrals in this study addressed social determinants of health (e.g., housing, insurance), we are not able to determine if ACEs screening was the best indicator to identify families who would benefit from wellness navigation. Another study of ACEs and social determinants of health screening found that caregivers were more likely to indicate their social needs than their child’s exposure to ACEs (Selvaraj et al., 2019). It is possible that other families within the pediatric clinics in this study would have benefited from wellness navigation services. For screening tools to be useful, they must inform clinical decision-making, improve the receipt of care, and improve patient health (Fryback & Thornbury, 1991; Garg, Sheldrick, & Dworkin, 2018). Future studies are needed to identify the most appropriate screening measures or procedures to address adversity and promote resiliency in pediatric settings (Garg et al., 2018). The use of total ACEs scores as opposed to individual items might be another limitation. Though using total, de-identified scores is a recommended practice to promote comfort with disclosure (Purewal et. al., 2016; Udesky, 2019), this might limit appropriate responses or referrals, including mandated reporting to child protective services. This concern needs to be closely monitored as ACEs screening continues to be scaled-up within pediatric practices, the question of whether and how individual items might be utilized should continue to be empirically examined. Finally and most importantly, this study was not able to establish if ACEs screening and responses actually led to improved physical and behavioral health outcomes in the short and long-term. Ideally, the ongoing RCT will begin to answer these questions as it investigates if the ACEs responses have differential impacts on parental stress and efficacy and infant resilience, along with physical health (e.g., asthma diagnosis and control) and medical services outcomes (e.g., compliance with well-child visits).

Even with these limitations, this study has a number of strengths that are important to consider in the ongoing conversation about how to screen for and address ACEs in pediatric practices. First, screening, study enrollment and referral completion rates were very high, with qualitative interviews pointing to the critical role that WNs had in these successes. As ACEs screening is widely implemented, at times through policy mandates, it is important to understand what system changes and supports lead to the best outcomes for families, especially for those at risk for health disparities. Notably, a systematic review determined that parents' perceptions of a lack of trust and confidence in providers, and cultural and linguistic barriers are critical factors that limit access to services for children and adolescents (Reardon et al., 2017). WNs can provide culturally and linguistically appropriate care for Latinx families, and task-share with other members of an integrated behavioral health care team to screen for and respond to ACEs. It is important to recognize the scope of practice of WNs within an integrated health care team, with pediatricians focusing on specialized medical services, behavioral health providers responsible for mental health treatment, and WNs providing the logistical and emotional support needed to best access these services and address barriers to well being (e.g., food security). Scholars encourage a shift towards investing in multidisciplinary teams using collaborative care models that incorporate WNs in primary care settings, to facilitate access to care and improve engagement and ultimately, outcomes for children (Hodgkinson et al., 2017).

Conclusions

In order to meet the potential of WNs to address health disparities related to ACEs, additional policies and procedures may need to be implemented. It is important to focus on the training and supervision needs of WNs in providing trauma-informed care as well as the pediatric providers' understanding of the role and integration of WNs into demanding pediatric practice settings (Broder-Fingert et al., 2019; Hodgkinson et al., 2017). Fully integrating WNs into pediatric practices may also require financing strategies to cover their salaries and benefits, as their services are rarely reimbursable through insurance. Bundled payments, with a focus on quality as opposed to quantity of care within a system, may facilitate the employment of WNs (Srivastav et al., 2017). Community health workers have been shown to reduce costly hospitalizations for clinically complex adults, suggesting a potential for health care savings to the system (Kangovi et al., 2018). On the other hand, evaluating the impact of WNs on health care system costs for children with ACEs may be more challenging, because the return on investment window may be substantially longer given that these efforts are intended to prevent the long term development of chronic health conditions (Srivastav et al., 2017). WNs in the current study also provided navigation services to children and adults with chronic health conditions (e.g., diabetes). Hiring navigators to address social determinants of health for individuals with and without chronic conditions may help save costs for the healthcare system in the short and long term.

Due to growing awareness of the health implications related to ACEs and recent policy efforts to address this public health concern, it is inevitable that ACEs will be more likely to be routinely incorporated into pediatric screenings. It is important for systemic shifts to respond to complex patient needs, which includes supporting a workforce that can provide culturally responsive and comprehensive services. Currently, ACEs screening and the mobilization of navigators and community health workers are increasingly being implemented to address disparities in physical and behavioral health outcomes (Barnett et al., 2018). Our study suggests that these two healthcare innovations have complementary goals and that WNs could play an important role in not only screening for ACEs, but also responding to them to better serve at-risk children and families.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Implications for Impact Statement:

WNs play an important role in providing linkages to social services in response to ACEs screening within pediatric practices. Task-sharing between WNs and professional behavioral health providers can help address health disparities for low-income, Latinx families impacted by childhood adversity.

Table 1.

Referrals Made by Wellness Navigators

Referral Category	Available Local Resources	Families receiving at least 1 referral	Families with completed referrals
1. Insurance	3	38	38 (100%)
2. Childcare	12	30	29 (97%)
3. Housing	7	26	26 (100%)
4. Service Linkage Number (211)	1	15	15 (100%)
5. Food	7	12	9 (75%)
6. Clothing	1	11	11 (100%)
7. Behavioral Health	4	10	7 (70%)
8. Employment	6	9	9 (100%)
9. Transportation	1	8	7 (88%)
10. Legal Support	9	7	6 (86%)
11. Disability Services	3	4	4 (100%)
12. Medical Support	5	2	2 (100%)
13. Domestic Violence	1	1	1 (100%)
14. Utilities	1	1	1 (100%)

Note. N = 99