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COVID-19

“A Lot of Things Stopped with COVID”: Screening Pregnant Patients for Opioid Use and Related Conditions During the COVID-19 Pandemic

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ABSTRACT

Objective: We explored the impact of COVID-19 on universal screening programs for opioid use and related conditions among practicing clinicians or staff who work with pregnant patients.

Methods: Semi-structured, in-depth qualitative interviews (n = 15) were conducted with practicing clinicians or staff in West-Central Florida between May and October 2020, representing both a range of professions and clinical settings that serve pregnant patients. Interviews were recorded, transcribed verbatim, and reviewed for accuracy. Independent coders conducted thematic content analysis iteratively in MaxQDA to identify emergent themes.

Results: Four main themes were identified: worsening health and life conditions of pregnant patients, impaired patient-provider interactions, lack of priority and resources, and conducting opioid screening remotely. Pregnant patients often faced worsening mental health, lack of connection with health care providers, and socioenvironmental factors that increased the risk of overdose and intimate partner violence. Health care providers and facilities faced an infectious disease pandemic that simultaneously increased mental burden and reduced resources. Telehealth improved access to health care for many, but also came with implementation challenges such as inadequate technology, the need to address barriers to developing rapport with patients, and difficulty with certain social screens.

Conclusion: These themes describe facilitators of and barriers to implementing opioid and related screening programs during the COVID-19 pandemic, as well as the increasing urgency of screening because of socioenvironmental factors. Patients, health care providers, and health practices may benefit from emergency plans that anticipate screening challenges given their increased importance during times of heightened risk, including disasters and epidemics.

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syndrome, the rates of which have dramatically increased in recent years (Patrick, Davis, Lehmann, & Cooper, 2015; Patrick et al., 2012). Children with fetal opioid exposure have increased risk for cognitive, neurodevelopmental, and behavioral health challenges ( Larson et al., 2019; Rubenstein et al., 2019).

To identify and address perinatal opioid use, several professional organizations recommend universal screening (American Academy of Family Physicians et al., 2019; American College of Obstetricians and Gynecologists, 2020; ANA Center for Ethics and Human Rights, 2017; Reddy et al., 2017). A targeted patient safety bundle identifies key primary practices to perform universally or secondarily, based on positive opioid use screens (American College of Obstetricians and Gynecologists, 2017b). For example, all pregnant patients should undergo primary screening, involving assessment for opioid and other substance use disorders using validated screening tools, and positive screens should initiate secondary screening for common comorbidities (Table 1) (American College of Obstetricians and Gynecologists, 2017b). Early identification and warm handoffs to dependency treatment, which involve face-to-face or telephone- or technology-mediated communication between providers, promote and improve maternal engagement in beneficial programs ( Taylor & Minkovitz, 2021). This range of programs may include dependency treatment, such as medication-assisted treatment (MAT); counseling or behavioral therapy; harm reduction; and social services to address social determinants of health, such as housing and food access; and/or other educational and prevention-oriented programs ( Ecker et al., 2019; Kroelinger et al., 2019; Sutter, Gopman, & Leeman, 2017).

Despite these recommendations, obstetricians often do not screen for opioid use during pregnancy, and few use validated screening tools ( Ko et al., 2020; Pentecost, Schmidt, & Grassley, 2021). A cross-sectional survey of obstetrician-gynecologists identified that, of the 35% of obstetrician-gynecologists who responded, 79% frequently screened for substance use while only 11% used validated screening tools ( Ko et al., 2020). Another survey identified that 32.3% of obstetric health care providers had inadequate training on substance use during pregnancy and were not comfortable verbally screening patients for substance use ( Pentecost et al., 2021). A minority of obstetricians usually recommend MAT to pregnant patients with opioid use disorder ( Ko et al., 2020). Insufficient clinician awareness and training, along with limited local services for patient referrals, may contribute to suboptimal screening ( Kroelinger et al., 2019). Health care providers confront additional screening barriers when patients face stigma and punitive consequences for use, such as incarceration and child removal ( Angelotta, Weiss, Angelotta, & Freedman, 2016; Polak, Kelpin, & Terplan, 2019). In addition to these barriers, several frameworks conceptualize other barriers to implementation of clinical recommendations and guidelines in health care settings and highlight factors across system levels (e.g., provider knowledge and attitudes, organizational support and resources, external policies) ( Cabana et al., 1999; Cane, O’Connor, & Michie, 2012; McNeely et al., 2018).

To improve prenatal opioid screening in Florida, a statewide quality improvement initiative, the Maternal Opioid Recovery Effort (MORE), was spearheaded by the Florida Perinatal Quality Collaborative beginning in November 2019 ( University of South Florida, 2021). Baseline data from the MORE initiative showed suboptimal prenatal opioid screening from a limited number of participating clinical sites ( Florida Perinatal Quality Collaborative, 2022). However, with the onset of COVID-19 ( Velavan & Meyer, 2020) and the “Safer At Home” statewide executive order (DeSantis, 2020), clinical and quality improvement processes were significantly impacted. The American College of Obstetricians and Gynecologists released prenatal care schedule modifications (2020) to limit COVID-19 exposure among pregnant patients. Clinical facilities enacted policy changes to identify COVID-positive patients and prevent transmission. Opioid overdoses increased in Florida and throughout the United States early in the COVID-19 pandemic ( Auty & Griffith, 2022; Garcia et al., 2022; Page, Chen, Jacko, & Sainfort, 2022), necessitating an increased focus on early opioid identification. However, the specific impact of the COVID-19 pandemic on providers’ experiences with universal opioid prenatal screening in Florida is unknown. Thus, this study aimed to explore the impact of the COVID-19 pandemic on universal primary screening for opioid use and secondary screening for common comorbidities in pregnancy.

**Methods**

A comprehensive list of regional clinicians, organizations, agencies, and community task forces that address perinatal substance use within an eight-country region was developed by the research team. These individuals and groups were e-mailed a survey about opioid screening during pregnancy and recipients were encouraged to forward the survey to those within their professional networks who may be interested and eligible to participate. The survey aimed to understand current screening practices and factors that affect screening through survey domains that addressed participant demographics, opioid and related screening practices, related workplace policies and procedures, and facilitators and barriers of screening. Within the survey, participants could indicate interest in participating in an hour-long interview. Survey recruitment occurred February to September 2020, with a pause from mid-March through early May because of regional COVID-19 acuity.

Of the 60 individuals who completed a survey, 16 indicated interest in being interviewed and were contacted by e-mail and/
or telephone to schedule a video-conferencing interview. One participant who did not complete a survey contacted the study investigator directly to complete an interview. We interviewed 15 English-speaking clinicians or staff who worked with pregnant patients in inpatient or outpatient settings within an eight-county area in West-Central Florida through Teams videoconference software, which participants could access through the Internet or by calling in by phone. Of the two individuals who did not schedule interviews, one declined because of work responsibility changes and the other did not respond to e-mails or phone calls.

We developed a semi-structured interview guide (Supplemental Material 1) to elicit opioid screening practices during pregnancy and information about how screening was affected by COVID-19; it was reviewed by three subject matter experts and modified to incorporate their feedback. Interviews were conducted May to October 2020 and were audio-recorded and transcribed verbatim. One researcher [TRF] read through all transcripts to ensure familiarity with the data. All responses related to COVID-19 were assigned to an a-priori COVID-19 parent code. Two researchers [TRF and SV] developed inductive codes directly from the data in an iterative process using MaxQDA 2020 (VERBI GmbH) and collaboratively developed a codebook to define and refine each code, definition, and inclusion/exclusion criteria. These researchers coded the transcripts using thematic content analysis (Cresswell & Plano Clark, 2011). We began by jointly coding one transcript with the updated codebook and resolving any coding discrepancies through discussion until reaching consensus. Both coders then separately coded two subsequent transcripts and intercoder reliability was calculated at kappa = .9. Parent and child code summaries were developed, and exemplary quotes were identified for each code. Refined coding definitions, inclusion and exclusion criteria, exemplary quotes, and summaries of findings were shared with the research team. The University of South Florida Institutional Review Board (IRB) reviewed this study protocol and determined the study to be exempt from IRB approval.

Results

The 15 interviews lasted 43 minutes on average (range 23–77 minutes). Participants represented various professions: generalist obstetrician (n = 1), maternal fetal medicine specialists (n = 3), pediatrician (n = 1), nurse practitioners (n = 2), registered nurses (n = 3), mental health counselors (n = 2), administrator (n = 1), parent educator (n = 1), and medical assistant (n = 1). Most participants worked in one large urban county (n = 8) and reported female gender (n = 13). Participants identified as White (n = 13), Black (n = 1), and Asian (n = 1) race and worked in a range of clinical settings that included inpatient medical settings, outpatient medical settings, social service agencies, clients’ homes, and jails. When compared with survey participants, the same proportion of participants were aged 20 to 29 (6.7%), more interview participants were aged 30 to 39 (46.7% vs. 30%) and 60+ (26.7% vs. 21.7%), and fewer interview participants were aged 40 to 49 (6.7% vs. 20%) and 50 to 59 (13.3% vs. 21.7%). A higher proportion of interview participants were physicians (33.3% vs. 25%) and advanced practice practitioners (13.3% vs. 6.7%); similar proportions of nurses (20% vs. 25%), social workers and mental health counselors (13.3% vs. 15%), and other participants, including administrators and medical assistants (13.3% vs. 11.7%), participated in interviews and surveys, respectively.

Four major themes emerged from the qualitative data: worsening health and life conditions of pregnant patients; impaired patient-provider interactions; lack of priority and resources; and conducting remote opioid screening (Table 2). Each of these themes is defined and described with exemplary quotes.

Worsening Health and Life Conditions of Pregnant Patients

Several participants discussed the impact of COVID-19 on the mental health of perinatal patients. One nurse practitioner reported an increase in anxiety and depression screens: “I’ve definitely seen [an] increase in anxiety in terms of [what] our [pregnant and postpartum] patients are going through. [There is] definitely a lot more anxiety and depression...” (#9, Nurse Practitioner).

A few participants described a confluence of factors that may have led to increases in overdose rates among pregnant and postpartum patients. Such factors included unemployment, loss of health insurance, loss of housing, difficulty accessing MAT, and increases in intimate partner violence. Overdose rates in nearby counties were described: “There are some places in Florida that have had huge changes in overdose rates in and around pregnancy with COVID... because you lose your job, you lose your income, lose your place to stay, and you may lose your medically assisted treatment [for opioid use disorder].” (#3, Obstetrician). Another participant from a home visiting program described a similar impact more locally: “I think the quarantine has a lot to do with [the local rise in overdoses] and also financial stress and intimate partner violence is on the rise.” (#6, Parent Educator). They went on to describe the impact on local housing. “One of the biggest challenges...we’ve had is housing. Housing is huge, trying to find places for people to go. It’s always a challenge, but with COVID it’s been off the wall. [We’re] trying to [find] a safe place for people to live.” (#6, Parent Educator).

Impaired Patient-Provider Interactions

The theme of impaired patient-provider interactions referred to how providers described interactions and relationships between patients and providers as negatively impacted by the COVID-19 pandemic. There were several ways in which providers perceived pregnant patients as isolated and disconnected from their health care providers. Providers had limited contact with pregnant patients as the prenatal schedule of visits was reduced and some visits transitioned to telehealth. During the less frequent in-person visits, both providers and patients were covered with additional personal protective equipment (PPE). A pediatrician described how the amount of PPE worn by health care providers affected their connection with pregnant patients, which, in turn, affected the connection and rapport upon which successful screening was predicated. “One of the biggest skills in [opiod] screening is building connection with [patients and developing] rapport. When you [cover] half my face [by PPE], it’s really tough to build as good a rapport.” (#11, Pediatrician).

Providers described how both they and patients may limit their face-to-face time in clinical settings to prevent prolonged exposure and potential COVID-19 transmission. According to participants, patients may have postponed or avoided in-person visits out of concern about COVID-19 transmission. This lack of face-to-face time negatively impacted screening, according to this participant: “There are times where we have COVID-positive patients that providers want to minimize their exposure, minimize their time with the patient. Whether that’s for better or for worse, it...” (#3, Obstetrician).
| 1: Worsening health and life conditions of pregnant patients |
|-------------------------------------------------------------|
| Poor mental health                                           |
| “I’ve definitely seen an increase in anxiety in terms of what our patients are going through. Domestic abuse, I don’t know because those patients are even less likely to come into the office. So I’m sure there is a repercussion there. But in terms of psych effects, definitely a lot more anxiety and depression as well. We’re seeing a lot more of that in our postpartum women, because I think we know to screen for that more in that population.” (#9, Obstetrician) |
| “More of our pregnant patients are more depressed and especially those moms that are [COVID] positive and we have to separate their baby from them while they are inpatient or we have to restrict their visiting ability because we have to wait for them to get retested and get the results before their visitation can be resumed. [We’re seeing], you know, anxiety, depression, and stuff like that.” (#5, Nurse Practitioner) |
| Factors increasing risk for overdose                         |
| “There are… huge changes in overdose rates in and around pregnancy with COVID because people were out of work and were getting evicted. People who use [medication-assisted treatment for opioid use disorder] from private providers or had to pay for it weren’t able to get it. They had a significant rise in overdoses in their pregnant population there… So COVID really hit hard in some of these women just because you lose your job, you lose your income, lose your place to stay, and you may lose your medically assisted treatment.” (#3, Obstetrician) |
| “I think the quarantine has a lot to do with [the local rise in overdoses] and also financial stress and intimate partner violence is on the rise.” (#6, Parent Educator) |
| Limited face-to-face time                                    |
| “There are times where we have [COVID-positive patients] that providers want to minimize their exposure, minimize their time with the patient. Whether that’s for better or for worse, it does hinder your ability to screen properly…” (#11, Pediatrician) |

| 2: Impaired patient-provider interactions                     |
|-------------------------------------------------------------|
| Protective equipment hindering patient-provider connection   |
| “I don’t think that somebody who is dressed in full [personal protective equipment, or PPE] is coming from a place of low intimidation for the mom [or] feels like a really good connection. I think it hinders [connection] overall. There’s an unaddressed or unidentified aspect of PPE as well. I don’t have a good smile, but people always talk about how great it is to see me smile. And I feel like with massive PPE we lose a lot of that. That’s really a part of human connection that we lose. One of the biggest skills in screening is building connection with [patients and developing] rapport. When you [cover] half my face [by PPE], it’s really tough to build as good a rapport.” (#11, Pediatrician) |
| “I think the quarantine has a lot to do with [the local rise in overdoses] and also financial stress and intimate partner violence is on the rise.” (#6, Parent Educator) |
| Limited face-to-face time                                    |
| “There are times where we have [COVID-positive patients] that providers want to minimize their exposure, minimize their time with the patient. Whether that’s for better or for worse, it does hinder your ability to screen properly…” (#11, Pediatrician) |

| 3: Lack of priority and resources                            |
|-------------------------------------------------------------|
| System priorities and lacking resources                      |
| “And so I think definitely in terms of the [opioid screening] initiative, COVID just took over and it was what everybody was thinking about. …For a while there was changing [guidance] every day, sometimes twice a day, what we were supposed to be doing. One’s brain is always so big [chuckle]. So I think we lost a lot of opportunities [for opioid screening] there because everybody was so focused on [COVID].” (#3, Obstetrician) |
| “But as far as just generally doing any kind of quality improvement right now, um, especially because over the last week or two, we are just seeing cases explode. All of our focus is on COVID again, so it’s hard to add anything else… People are having to take forced [paid time off] because of low reimbursement… Clinics are feeling it because we’re having to purposely decrease our volume, so [there isn’t] money to do anything right now. We’re barely making it so that we can continue to keep our employees employed. [Proposing opioid screening or] anything that involves more money is going to be [denied].” (#1, Obstetrician) |
| “A lot of things stopped with COVID because everybody was in COVID overload, so you could barely think beyond that. There were so many issues each moment to things that we had to hang on to. So now we can go back to adding other things. Unfortunately for us, this [opioid screening initiative] started at a really difficult time. …Many large hospital systems just put a pause on it because they furloughed people, people were working at home, they didn’t have access to the hospital [medical record system]. The presence of COVID has certainly negatively impacted the [opioid screening initiative].” (#3, Obstetrician) |
| Providers are overwhelmed (particularly early in epidemic and during times of high rates of COVID) |
| “[COVID has] completely taken all focus off anything else. Everything else has been thrown out of the window as far as any new quality initiatives because so [many] resources have been devoted to COVID that it’s taken away from everything else… As clinicians, we’re drained for having to deal with it. [We have] very little reserve left in doing anything in addition to just doing medical care and all the COVID things on top of it. We’re already bombarded with literally e-mails every day that change about what we have to do, screening policies for [COVID], which have been changing on an everyday basis…” (#1, Obstetrician) |
| “And the [opioid screening] initiative, thankfully, there already was a structure there regarding how all of that is put together and we already have funding for that, so, you know, I think that can potentially be a thing, but, you know, as far as the people’s willingness to participate, we’re exhausted. So, you know, we’re all on edge. We’re all like mentally exhausted. Like, I was just talking to my boss and my other colleagues and we’re just, you know, and now, unfortunately, we’re seeing a surge. So we’re all like, ugh, we’re so over this. We are so tired. Um, and now it’s just going to get worse.” (#1, Obstetrician) |

| 4: Conducting opioid screening remotely                      |
|-------------------------------------------------------------|
| Remote visits improve opioid screening                      |
| “I think [COVID] is positively affecting [our ability to conduct opioid screening]. I really think it’s helping break down a lot of barriers with these moms. We’ve had a lot of moms being very blunted about the fact that they were dodging our calls until we offered them telemedicine. They met us virtually when they were comfortable, where they have the ability to hang up. [laughs] And then we built a relationship, and we get text messages from these moms that are saying, ‘I’m so glad I met you guys.’ So I think [telemedicine is] very helpful [for opioid screening].” (#4, Registered Nurse) |
Remote visits can hinder opioid and related screening. "There are pluses and minuses [to remote visits and screening]. Some people love it. Some people, we've learned that when we're opening a new person, we start by phone because it's just too uncomfortable and intrusive to do a video conference the first time. And as I experienced with you, [chuckle] I had technical difficulties because you're kind of like, just click on the link — how hard is that? But it proved to be very hard. So for the first month or so, we barely [screened] anybody. But then we [tried doing] the first two or three [visits by] phone calls and kind of get to know each other and then say, well, how would you feel about doing a video conference next time? We kind of built up to that. It's not as good in terms of being there in person and interacting, but it's easier for some." (#6, Parent Educator)

Lack of Priority and Resources

Many participants described how health system priorities and lacking resources affected screening during pregnancy, particularly early in the pandemic. An obstetrician described how COVID-19 was central and how that may have taken attention away from quality improvement initiatives, such as opioid screening. "COVID just took over and it was what everybody was thinking about... I think we lost a lot of opportunities [for opioid screening] there because everybody was so focused on COVID." (#3, Obstetrician).

Participants from clinical health care settings described a lack of resources to allocate to nonessential tasks, such as opioid screening and other research and quality improvement initiatives, because of changes from the COVID-19 pandemic. These changes included factors such as staff not able to access electronic medical record systems from home, reduced patient load, and low reimbursement. In addition, prenatal opioid screening programs were negatively impacted by the timing of the COVID-19 pandemic and what was described as "COVID overload." One participant addressed the impact of limited resources and mental overload:

"A lot of things stopped with COVID because everybody was in COVID overload, so you could barely think beyond that... Unfortunately for us, this [opioid screening program] started at a really difficult time. ... Many large hospital systems just put a pause on it because they furloughed people, people were working at home, they didn't have access to the hospital [medical record system]. The presence of COVID has certainly negatively impacted the [opioid screening] initiative." (#3, Obstetrician)

A few participants described how COVID-19 required a high level of attention and focus, particularly early in the pandemic with rapidly changing clinical guidance and recommendations. This led to providers feeling overwhelmed, especially during times of high COVID-19 rates and patient loads.

"[COVID has] completely taken all focus off anything else. Everything else has been thrown out of the window as far as any new [opioid screening] initiatives because so [many] resources have been devoted to COVID that it's taken away from everything else... As clinicians, we're drained for having to deal with it. We have very little reserve left in doing anything in addition to just doing medical care and all the COVID things on top of it." (#1, Obstetrician).

Conducting Opioid Screenings Remotely

Because of COVID-19 and local policies to mitigate public transmission risk, several changes were made within clinical offices and practices. Many clinical visits were transitioned to video- or phone-based telehealth visits. Practices also limited the number of people in the office, such as not allowing visitors or support people. Many of these changes were discussed by participants as positively impacting patient engagement and opioid screening, although some changes were perceived negatively.

Prenatal care visits transitioning to video-conferencing or telephone telehealth appointments was most frequently described positively in terms of increased access to health care providers and an improved ability to conduct opioid screening remotely. Several participants described the benefits of meeting remotely, which reduced barriers for patients to attend appointments. One registered nurse described how meeting remotely helped opioid screening because their patients/clients were better able to be comfortable and build a relationship with their provider.

"I think [COVID] is positively affecting our ability to conduct opioid screening. I really think it's helping break down a lot of barriers with these moms. We've had a lot of moms being very blunt about the fact that they were dodging our calls until we..."
offered them telemedicine. They met us virtually when they were comfortable, where they have the ability to hang up. [Laughs] And then we built a relationship, and we get text messages from these moms that are saying, 'I'm so glad I met you guys.' So I think telemedicine is very helpful [for opioid screening]. (#4, Registered Nurse).

However, transitioning some prenatal care to telehealth was perceived negatively by some participants. Although telehealth visits were generally accepted, some practices and patients lacked the necessary technology. A nurse practitioner described the difficulty of opioid screening by phone because their practice lacked the resources for other telehealth visits and, as a result, they were missing nonverbal components of communication that limited the quality of their opioid and mental health screening.

[We've transitioned to] limiting patients in the office... so you're not really having that sit-down face-to-face interaction [with patients]. We don't have video-conferencing technology yet in the office, so [we're conducting screening] on the phone... but we're not able to pick up on nonverbal cues and things like that that usually help prompt me into thinking, 'OK, this person is saying they're fine and happy. But just looking at them, I can tell that they're not.' (#9, Nurse Practitioner)

Another participant also described the importance of evaluating their patients’ affect and overall presentation as an important component of opioid screening, which is missed when patients are screened remotely: "...When you're doing the opioid screening and assessment, sometimes it's not what your client is telling you, it's how they present. You're not seeing that, you know. presentation [when having fewer in-person visits]." (#13, Social Worker)

In addition to technological barriers, one screen was found to be particularly difficult to perform remotely: intimate partner violence (IPV). A few participants described this difficulty, which was summarized by one registered nurse: "The one negative thing I would say is that IPV screening, we're a little more cautious on how we do that because we don't know who could hear it." (#4, Registered Nurse).

Discussion

This study highlights the impact of the COVID-19 pandemic on universal primary screening of pregnant patients for opioid use and secondary screening for common comorbidities. Most of the impacts of COVID-19 on primary and secondary opioid screening were identified as negative. Providers reported impacts of COVID-19 on their patients/clients, including perceiving that patients were experiencing greater burdens of depression, anxiety, and difficulties with employment and housing. Because of COVID-19 mitigation strategies, patients may have reduced interaction time with providers and their face-to-face time was with added protective equipment, decreasing opportunities for rapport building and thus limiting high-quality screening. Providers were also affected, especially in terms of competing priorities and the mental burden of changing COVID-19 clinical recommendations. These provider-related demands also negatively impacted screening due to de-prioritization. Clinical settings and practices faced decreased patient load and reimbursement, which affected staffing and funding available for screening programs and quality improvement initiatives. This affected implementation of the statewide perinatal quality improvement initiative to increase prenatal opioid screening.

However, certain practice changes had mixed effects on screening. Increased patient access through telehealth may have improved opportunities for opioid screening, whereas lack of technology and difficulty performing screening for IPV impeded both primary and secondary screening.

Participants in this study described their perceptions of the impact of COVID-19 on pregnant patients. Clinicians reported increased rates of overdose, perhaps related to policy and socioeconomic effects of the pandemic and associated mitigation policies, such as losses in employment, income, health insurance, and housing. This aligns with findings from previous studies that demonstrated changes in social determinants of health during the COVID-19 pandemic, such as decreased employment and income, increased housing instability and homelessness, and difficulties accessing health care (Green, Fernandez, & MacPhail, 2021; Lin, Law, Beaman, & Foster, 2021). Perhaps resulting from these changing conditions, several studies have also reported increases in substance use and overdose (Vo, Patton, Peacock, Larney, & Borquez, 2022), mental health conditions (Chen, Pusica, Sohaei, Prassas, & Diamandis, 2021), and family and interpersonal violence during the COVID-19 pandemic (Mazza, Marano, Lai, Janiri, & Sani, 2020; Moreira & Pinto da Costa, 2020; Sanchez, Vale, Rodrigues, & Surita, 2020). These family and household impacts of COVID-19 may also reduce pregnant individuals’ participation in health care visits, limiting the ability to be screened for opioid use and related conditions.

Telemedicine use was intended to mitigate barriers to attending clinical visits while supporting social isolation to prevent COVID-19 exposure and transmission (Fryer, Delgado, Foti, Reid, & Marshall, 2020). Many participants described how beneficial telemedicine was to engage patients remotely and limit COVID-19 exposure. However, patient or practice deficiencies in technology or internet hindered telehealth visits. In addition, with people at home to avoid COVID-19 exposure, having older children, large family households, or abusive or controlling partners may preclude the necessary privacy for remote visits with health care providers. Limitations of telemedicine implementation during COVID-19 have previously been identified in the literature, particularly for exacerbating inequalities for families and patients already at risk of low clinical engagement (Katzow, Steinway, & Jan, 2020; Madden et al., 2020). Furthermore, the present study also identified issues that providers must address to effectively use telemedicine, such as the need to build rapport and the difficulties of screening for IPV, to successfully implement opioid and related screening recommendations.

The need for patient-provider rapport within the context of effective screening is well known (American College of Obstetricians and Gynecologists, 2017a). Within the additional context of the COVID-19 pandemic, however, rapport may be particularly important. Patients and providers may have less face-to-face time, limiting the ability and effectiveness of screening. With remote visits, providers may need to learn additional strategies for developing rapport (Newcomb et al., 2021). Likewise, with the stress of in-person visits increased from limiting visitors, wearing additional layers of PPE, and fears about COVID-19 necessitating separation of patients from their newborns, new approaches for rapport may be needed. Moreover, providers may face additional burnout, compassion fatigue, and an overall sense of being overwhelmed, in addition to the physical burden from wearing extensive PPE (Rao et al., 2021). Thus, health care systems and practices may benefit from implementing worksite trainings on a range of topics, such as
developing rapport in virtual clinical environments, the importance of substance use and mental health screenings, and provider self-care.

This study had several strengths and limitations. The study benefits from the perspectives of a diverse group of health professionals who work in a variety of clinical settings. Many participants reiterated similar points, which increases confidence in the findings. This was a timely study, simultaneously occurring during initial implementation of a statewide quality improvement initiative to improve opioid screening during pregnancy and shortly after COVID-19 mitigation strategies were enacted. However, there are also limitations to this study. With a focus on clinical providers and their self-selection into the study, it is unknown how well the findings can be generalized to a patient/client perspective or to other regions. In addition, recruitment patterns varied throughout the course of the study, largely due to provider clinical demands and availability for interviews. For example, most obstetrician interviews took place early and interviews with participants from other professions later in the study, causing the professions of participants to be generally clustered in time within the recruitment period. Therefore, we do not know whether participant perspectives varied over the course of the pandemic or if any temporal differences in findings were an artifact of recruitment patterns. Future studies may wish to gain the perspective of patients/clients and to quantitatively determine the importance of substance use and mental health screenings, and provider self-care.

In the face of increased risks for substance use and overdose, poor mental health, and related conditions such as IPV, it is critical to develop plans to ensure appropriate and comprehensive screening in the face of major global pandemics and disasters. Without focused attention and commitment, clinical changes because of COVID-19 may worsen existing health inequities among populations at risk (Onwuzurike, Meadows, & Nour, 2020), such as pregnant individuals with substance use. However, providers face competing priorities and changes in allocation or lack of resources, along with periods of high patient load and acuity, that negatively impact their mental health and ability to engage in quality improvement projects. In addition, measures to mitigate infectious disease spread may affect mental health and social connectedness among patients. Telemedicine and other technological interventions can address some patient screening challenges; however, barriers to implementing telemedicine, limitations in the ability to perform certain social screenings, and difficulties building rapport need to be addressed to engage in effective trust-building and screening.

Conclusion

Screening during a global pandemic is critically important because of related policy, sociocultural, and economic changes that may increase risk factors for substance use while simultaneously decreasing access to educational, preventive, and treatment programs and services. The COVID-19 pandemic resulted in increased substance use and overdose, IPV, and mental illness, along with changes in social determinants of health, such as housing and food insecurity. Consequently, it is vital to universally screen people at critical points, such as pregnancy and childbirth, and to incorporate these screens into emergency and disaster planning and management.

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