The Columbia University Journal of Global Health

Letter from the Editors

Dear Reader,

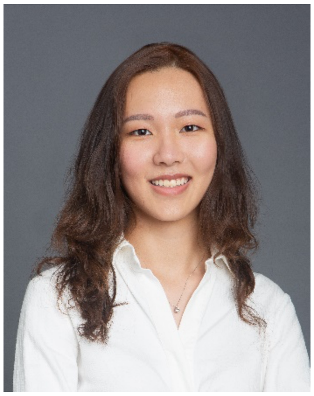
In 2023, the Columbia University Journal of Global Health continued to impact the Columbia campus community and beyond. Through leading discussions in public health and engaging with faculty across institutions, we strive to share research perspectives from around the world that confront the challenges of achieving equitable and accessible healthcare. We continue to celebrate the importance of research and the underlying rigor of the scientific process. We are excited to share our newest Spring 2023 issue with our readers.

Our community engagement efforts in New York resulted in multiple collaborations with Columbia University Mailman School of Public Health faculty and the New York City Fire Department, which has engaged the Columbia University student body in relevant and timely global health topics. We distributed fentanyl testing kits and partnered with the New York City Fire Department for a CPR training event to educate students with useful skills in addressing health emergencies. In February, we hosted a panel discussion titled "Black Professionals in Public Health", which featured guest speakers Dr. Paris Adkins-Jackson–Assistant Professor at the Columbia Department of Epidemiology and Sociomedical Sciences–and Dr. Kiros Berhane–Chairman of Biostatistics at the Columbia Mailman School of Public Health. Adkins-Jackson and Berhane addressed how they designed research studies to investigate racial disparities in access to care and navigated public health and academia from a personal perspective.

In recognizing the importance of having accessible and open scientific communication between the scientific community and the general public, our "What is Global Health?" podcast and blog has served as an active online platform to foster discussions with Columbia faculty. Our recent blog posts share perspectives on topics from women's menstrual health to global hunger. The newest episode of the podcast features a discussion on utilizing data science to inform public health with Dr. Mary Beth Terry from Columbia University's Mailman School of Public Health.

This Spring 2023 issue explores public health topics including a novel community participatory approach to violence intervention programs for Latino youth, challenges in accessing maternity care for immigrants and medical interpretation. We would like to express our gratitude towards our journal team, faculty advisors Esther Jackson and Professor James Colgrove, authors and peer reviewers for their submissions and contributions without which our journal could not exist.

Sincerely,
Scarlet Au & Kaira Oraedu
Co-Editors-in-Chief,
The Columbia University Journal of Global Health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5464 Lerner Hall
2920 Broadway
New York, NY, 10027, USA
info@ghjournal.org
ISSN: 2166-3602 (Print) ISSN: 2166-3599 (Online)

The Columbia University
JOURNAL of
GLOBAL HEALTH

Novel Community Participatory Approach to Violence Intervention Program for Latino Youth

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ABSTRACT Firearm violence is heavily prominent in large urban cities. Upon closer inspection, evidence reveals that violence clusters in marginalized minority populations. In fact, gun violence is the leading cause of death for Hispanic youth aged 15 to 29 in the United States [3]. Unfortunately, many current intervention programs lack the cultural competencies needed to engage directly with impacted communities. This article highlights a novel community participatory collaborative approach to violence intervention. Collaborating with an established program, the VOICE (Violence Outreach Intervention and Community Education) Program, youth from the greater Essex County area participated in gun violence awareness sessions. Activities included virtual education workshops, in-person teaching sessions, and local community engagement activities. The program shows how community engagement, meeting students where they are, could help us create awareness on how to de-escalate violence. This participatory approach could be an innovative way to break the cycle of violence in our youth, especially Latinos.

KEY WORDS latino youth, violence intervention, community engagement

INTRODUCTION

The social-ecological perspective of youth exposure to violence and difficulties is thought to be a combination of individual, family, school, and community risk social factors that contribute to increased violence. Thus, no single predictor of one's inclination to engage in violent behaviors exists. Gun violence is a leading cause of premature death in the U.S., and guns kill more than 38, 000 people and cause nearly 85, 000 injuries annually [1]. According to the CDC, the United States has the highest rate of gun violence among developed nations: 45, 222 people died from gun-related injuries in the U.S. The data includes those that were unintentional, those that involved law enforcement, and those whose circumstances could not be determined, beyond gun-related injuries. However, while gun murder or homicide garner more national attention, in 2020, 54% of all gun-related deaths in the U.S. were suicides (24, 292), while 43% were murders (19, 384) [2], making suicides account for the majority of gun deaths in the United States.

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This is a concern for youths and young adults aged 10-24 years. Hispanic have reported a higher rate of suicidal ideation (16.7%) and suicide attempts (10.2%) compared to their White and African American adult counterparts. Many of these rates relate to their environment and dynamics associated with their social determinants of health. Furthermore, urban minority youth face unique social and cultural challenges that may correlate with developing coping and emotional self-regulation skills. Some of these challenges include acculturation, the public discourse about immigrants or the negative public attitudes about Latinos, and family dysfunction. All of these factors can contribute to the suicide disparities among Hispanic adolescents. Moreover, gun violence is the leading cause of death among Hispanic youth aged 15 to 29 in the United States [3]. Therefore, mental health must be de-stigmatized to address suicide and gun violence. There is little research existing on uniting gun violence prevention efforts among the fields of social work and public health [4]. Furthermore, in 2020, firearms became the leading cause of death among children ages 19 and below, and, in the first six months of 2022, there were over 300 mass shootings across the U.S., including the shooting at Robb Elementary in Uvalde, Texas [5]. In the first three weeks of 2023 alone, there have been 53 mass shootings [6].

Due to the COVID-19 pandemic and “stay-at-home” orders, social isolation has triggered a rise in all forms of violence in the United States. Prior to COVID-19, data has shown that 40% of Latino youth experienced persistent feelings of sadness and hopelessness [7]. These indicators, usually linked to symptoms of depression, are related to low academic and social connectedness that can increase suicide rates [8]. Further, violence is one of the extreme manifestations of racial, ethnic, and economic disparities in the U.S., with substantially higher rates in historically disadvantaged communities [9]. To combat this public health crisis, the federal government funds hospital violence intervention programs (HVIPs) in clinical settings [10]. In addition, the Office of National Violence Prevention (ONVP) seeks to bring together key leaders across the federal administration to develop a comprehensive, coordinated and sustained effort to address all aspects of violence in the U.S. [9]. This intervention strategy promotes safe, stable, nurturing, positive relationships and experiences for youth in urban communities and addresses some of their adverse experiences through education and connection to their community.

A LOCAL SOLUTION

We collaborated with an established program, the VOICE (Violence Outreach Intervention and Community Education) Program, based in Newark, New Jersey. The VOICE Program team used evidence-based literature to develop educational videos that address gun violence and related health issues. The VOICE team adopted a framework for community-centered, mobile health intervention development [11, 12]. Topics include (1) gun violence prevention introduction, (2) effects of gun violence, (3) gun safety planning and crisis management, (4) gun violence intervention programs, (5) gangs and gun violence exposure, (6) the role of depression in gun violence, (7) substance abuse and drug use, (8) intimate partner violence, and (9) COVID-19 related issues. The VOICE program team engaged in a learning collaborative comprised of community workers and healthcare providers to promote gun violence prevention. The VOICE Program has been shown to improve community health outreach, knowledge, awareness, and the likelihood of help seeking and treatment [13]. Detailed VOICE program development, implantation, and evaluation methods are described elsewhere. [11,12,13]. The VOICE program was adapted to deliver violence prevention education to the youth and close the existing gaps for culturally relevant content. The public health framework for violence intervention is based on the socio -ecological determinants of violence; in understanding the structural factors that lead to violence. However, our youth outreach is based on the community mobilization framework that supports community efficacy, social cohesion, and collective empowerment, emphasizing community members as valuable partners in this intervention.

MATERIALS AND METHODS

The violence intervention program was conducted from November 2022 to July 2023. This program was approved by Rutgers NJMS Institutional Review Board (IRB). The violence intervention program participants comprised youth from the greater Essex County area of New Jersey. To maximize the program's impact, we collaborated with organizations from the greater Essex County, NJ area that emphasize increasing the representation and retention of minority youth across all stages of the educational spectrum (high school to college). This program included reaching out to pipeline programs, community organizations, and after-school initiatives. These programs often recruit students from underrepresented and underserved communities who have shown the potential for excellence but may not have had the social capital or displayed the resilience needed for academic success.

The VOICE program complements these academically oriented programs by addressing sociocultural factors that may be prominent in an underserved urban community, such as intimate partner and gun violence. Taken together, VOICE and educational programs provide resources for disadvantaged youth by increasing awareness of community factors contributing to their prosperity of themselves and the community. Programmed activities within the violence intervention included virtual education workshops, in-person teaching sessions, and local community engagement activities. We conducted both individual and group sessions throughout the program period.

The MOST (Moving On from Surviving to Thriving) Program was a set of 4 virtual workshops conducted for high school students to help address the top topics in the community. The program spanned one month between November and December 2021. Workshops included Reducing Youth Violence, Understanding your Mental Health, Coping Strategies, and Developing Support Systems. The recruitment for the MOST program was via social media specifically Facebook, and Instagram.

The Northeast Regional Alliance (NERA) MedPrep is a summer enrichment program for under-represented or economically disadvantaged college students interested in medicine. NERA’s well -being program initiative incorporated violence prevention workshops. The curriculum exposed students to violence prevention educational content on the effects of gun violence, mental health, and interpersonal violence. Over one month, June 2022, we coordinated 3-violence prevention and 3-self-defense workshop activities to complement the didactic presentation.

Mentor U Connect (MentorU), a local mentorship youth organization based in Newark, hosted two educational sessions and self-defense workshops over 1 month, June 2022. This program development for the staff, including the mentors and mentees (high school and college students), was necessary to increase awareness about violence at home and on the streets. The staff are community and student leaders who can help spread awareness and help de-escalate violence among their peers.

Tabling at the New Jersey AIDS Walk (May 2022) allowed us to connect with the community and educate elected officials, community members, representatives, and delegates from other community organizations and non-profits on our violence intervention program. The community event was a unique opportunity to promote our program and provide valuable information and resources to invisible communities, such as the LGBTQ+ community.

Hence, all program workshops, except the Community AIDS Walk, were structured similarly. The facilitators introduced the program to the participants. Then participants selected 2-3 VOICE program videos (8 total videos) to view from the complete inventory list. After watching the videos, students participated in brief lectures and community-building activities centered on the themes and topics presented in the VOICE program. The program lectures aimed to provide a safe, nonjudgmental space for participants to voice their views and stories. The team leaders facilitated discussions and shared personal stories and current events surrounding the program topics. Finally, a Post-survey assessed the impact of the content on knowledge and attitudes. The complete inventory of VOICE videos was made accessible through QR codes. Any individual with an internet connection and access to a mobile device could participate. For those who did not have a phone, we offered mobile, Wi-Fi-hotspot-connected iPads and devices. For the Community AIDS Walk, participants were eligible to view the VOICE videos, with the same pre/post survey that was administered in the workshops. The setting of the walk provided us an opportunity to engage with the community by illustrating and providing examples of how we can all help address violence in our communities.

The Post-survey was administered to assess the impact of the content on knowledge and attitudes. Participants were asked questions such as “are you satisfied with the video presentation” and “would you recommend this video to your family/friends?” They were given answer choices of yes and no. For the post-knowledge survey, the score was based on the participant’s outcomes in regard to content satisfaction, video recommendation, and knowledge gain.

RESULTS

Gun Violence is a public health crisis, but youth program initiatives could help break the cycle. While hospital-based violence intervention programs can be effective in engaging and educating minority urban youth, they do not address all of the socio-economic factors that prone youth to violence behaviors in a culturally competent, relevant, and structured manner. Through community rapport and collaboration, violence prevention programs (such as VOICE) can break the cycle and prevent on-going negative consequences of community violence.

Participants selected videos on 8 different topics and elected to participate via online survey. Each animated video topic was approximately 5 minutes. Outcomes were based on content satisfaction, video recommendation, and knowledge gain. The videos were available in both English and Spanish. The study had participants (n=174) were between the ages of 14-25; they were about evenly split, 51% (males) and 49% (females). Minority participation was over 75%, and most participants identified as Hispanic (55.2%) or Black/African American (20.1%). Based on these results, to address this health crisis, we need culturally competent interventions. Studies have shown that culturally relevant content promotes a strong sense of group ownership, ethnic identity, and community-building [14]. This study entails identifying what kinds of information and approaches are most effective in changing an individual's behavior concerning firearm misuse and interpersonal abuse via educational workshops materials, and resources in Spanish and English language.

Participants viewed six videos on the topic of "gun and interpersonal violence" (77.6%), and two on "mental wellness and coping strategies" (22.4%). In addition, 87.0% of participants would recommend viewed content to friends or family, and 85.0% of participants were satisfied with the content. Consequently, interventions that involve other stakeholders, like schools or community organizations, can serve as positive protective factors. Programs may incorporate this positivity in various ways, from individual counseling sessions to administrative policies and rules for community-based organizations [15]. In order to help address or de-escalate violent incidents, we need to provide our youth access to resources, especially at-risk youth who are often victims of violence. In fact, 94% of participants who viewed content on gun violence intervention programs, in general, either agreed or strongly agreed that intervention programs may help prevent future violence in the community. If our youth are to respond and meet high expectations and a demanding world, we must build and support strategies that foster students in nurturing their talents, building new skills, and mastering tough hurdles [16]. Participants showed high post-knowledge scores (95.1/100) after educational interventions, workshops, and content. Female participants were nearly 25% more likely than males to recommend the program to their friends (p= 0.003). To address violence, we must address the social norms on how violence is portrayed. Family and social risk factors could be the catalyst that promotes or reinforces violent behavior. In fact, violence witnessed during childhood may negatively impact adult mental health [17].

It is thought that a strong sense of community promotes young adults and later adults' mental health and resilience, regardless of the presence or lack of violence in their childhood experiences. Students need healthy communities where they can feel safe to thrive and succeed. The best solution for violence is prevention. Therefore, for prevention to succeed we need community intervention. Research shows that youth engagement reduces downstream risks of violence while simultaneously endorsing community membership and the development of positive youth competencies and positive emotional health [18, 19]. Our youth need resources as in career readiness, college navigation, mentorship and social support, these youth engagements become positive protective influences that could help address the youth risk factors associated with violence, especially in urban cities. Community Organizations are established, trusted partners in the community. A goal for violence prevention initiatives is collaboration with local organizations to help maximize awareness and developing long-lasting trust.

CONCLUSION

This community participatory-based violence intervention program was focused on engaging and educating minority urban youth. Adapting this community intervention program for our youth yielded positive outcomes on participants' knowledge, attitudes, and satisfaction with content. Thus, participants amplified awareness on how to act when witnessing violence, to de-escalate violent incidents, and to access resources for victims of violence. The goal of the youth initiative was to provide practical information via gamification video formats that are actionable steps that empowers them in a violence situation. Moreover, the community collaboration with local leaders and schools became a positive protective factor; participants learned—through VOICE—to invest themselves more positively into the community. This supportive network of collaboration may counterbalance the likelihood of exposure to violence. After-school programs and community support may offer an avenue to decrease the incidence of violence exposure. Resilience-based narratives via community violence intervention programs as a socially driven mediation could ultimately be the quintessential positive protective factor buffer against violence for youth in urban cities.

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An Adaptable Approach to Expanding our Knowledge of Medical Interpreter Experiences

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ABSTRACT Medical interpreters are vital constituents in positively affecting the health of populations with limited English proficiency. Global Wordsmiths, a social enterprise based in Pittsburgh, Pennsylvania, explored the experiences and needs of their medical interpreters using a survey adapted from a variety of qualified sources in health care quality improvement, health literacy, and needs assessments of populations with limited English proficiency. Participant dialogue suggests that medical interpreters serve multiple roles beyond word-for-word translation; however, what also becomes apparent is a lack of adequate training and psychosocial support among the profession. The burden of extraneous roles outside their defined job responsibilities and the need for more psychosocial support hinders medical interpreters' ability to positively affect healthcare access, quality, and outcomes among populations with limited English proficiency. As such, we identify a vital need for health literacy research and practice to further investigate medical interpreters' experiences.

KEY WORDS limited English proficiency, health literacy, health services accessibility, communication barriers

INTRODUCTION

In the United States, 65.9 million people aged five and older speak a language other than English at home[1]. Further, one in every 13 people speaks English less than "very well"[1]. Language barriers between patients with limited English proficiency (LEP) and healthcare providers adversely affect healthcare access, quality, and outcomes for this population. Disparities among this demographic are so pervasive that Executive Order 13166[2], published in 2000, requires federal agencies, including federal healthcare programs, to develop systems to improve access to their services for persons with LEP. Guidance on meeting these requirements, which often necessitates enlisting medical interpreters[3], was published by the Department of Health and Human Services in 2003 and continues to be used today[4].

There are several studies exploring medical interpreter experiences in difficult medical situations such as oncologic, end-of-life, and intensive care settings[5-10]. Despite the profession's essential contribution to

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reducing healthcare disparities among the nation's growing number of individuals with LEP, there is little research exploring medical interpreter experiences outside these high-stress situations. As such, the invaluable perspectives of medical interpreters endure as untapped insight with the potential for advancing health literacy research and practice aimed at improving health care access, quality, and outcomes among the population of individuals with LEP. This report describes one approach to exploring these aspects of the profession among a group of medical interpreters based in Pittsburgh, Pennsylvania.

METHODS

Study Setting

Global Wordsmiths, a social enterprise based in Pittsburgh, Pennsylvania with the mission to create and advance a culture of language accessibility, provides translation in 40+ languages, interpretation services in-person and virtually on demand in 100+ languages, and language access consulting and training for organizations such as health care systems, school districts, corporate commerce operations, and municipal governments. Profits from these services subsidize initiatives such as free translation and interpretation to nonprofits, quality jobs and growth opportunities for their linguists, and improved language access policies and procedures among service providers. These initiatives directly enable equitable access to services for individuals with LEP while helping clients expand their service capacity, comply with legal regulations, and build sustainable accessibility policies.

Partaking in a quality improvement project, Global Wordsmiths partnered with the Health Care Improvement Foundation (HCIF) to qualitatively assess the needs and experiences of their medical interpreters. HCIF is an independent nonprofit founded to support a responsive, coordinated healthcare delivery system that fulfills the needs of patients and consumers to achieve improved health through large-scale collaboration with health systems, community-based organizations, payors, and various other stakeholders. This work was supported through the Pennsylvania Health Literacy Coalition's Immigrant Health Literacy Initiative, funded by the Centers for Disease Control's Preventive Health and Health Services Block Grant through the Pennsylvania Department of Health.

Participant Recruitment

Convenience and purposive sampling methods recruited eligible participants which included current Global Wordsmiths medical interpreters as of June 2020. This population is involved in a plethora of healthcare settings, the top three during 2019-2020 being optometry/ophthalmology, obstetrics/gynecology, and otolaryngology. The opportunity to participate in the study was communicated via email on June 10, 2020 to all 46 eligible participants. They were given 10 days to participate, with two reminder emails sent over this time. On June 21, 2020, responses were analyzed, and an additional email was sent to interpreters of underrepresented languages, offering an extra three days to participate. Compensation was provided for survey completion.

Survey Creation

A survey exploring medical interpreters' experiences with medical providers, patients, and their employers was created by HCIF and piloted by a reference group comprising a former Global Wordsmiths medical interpreter and administrative staff from Global Wordsmiths. Questions were adapted from experienced sources (Supplementary Materials 1) in healthcare quality improvement, health literacy, and needs assessments of populations with LEP. The first page of the survey included confirmation of informed consent. Questions thereafter moved from specific demographic information to more general, open-ended responses about their experiences first with medical providers, then patients, and finally their employers. The final survey questions can be found in Supplementary Materials 2.

Data Collection

The survey was administered via Qualtrics, and most participants completed the questionnaire on personal electronic devices. Seven eligible participants were asked to participate virtually due to prior written communications indicating relative ease of oral interactions. Surveys completed virtually were administered by HCIF and responses were transcribed directly into Qualtrics.

Data Analysis

The final sample size was 26, with a 56.5% response rate. Responses were cleaned, ensuring no identifying information was present, and HCIF utilized Qualtrics Stats iQ and qualitative methods to code all responses. We used the phenomenology paradigm to explore the nature of the medical interpreters' experience working at Global Wordsmiths. Phenomenology allows for rich accounts of a small number of individuals' lived experiences, in this case, those of Global Wordsmiths medical interpreters. Responses were analyzed using a content analysis approach. The following codes were used to code all responses: medical interpreter roles, expectations of medical interpreters, needs of medical interpreters.

RESULTS

Interpreter Voices: The Medical Interpreter's Role

Participants were asked what they believe medical providers expect from them. There were mixed results, with some reporting that medical providers expect them to "just interpret" and "don't add any personal opinions" while others felt providers expect more than simple word-for-word translation and relied on them for explaining medical terms and conditions. This difference in beliefs among participants was further highlighted when subsequently asked what they believe patients expect from them. One response read, "I feel like patients trust medical interpreters more when they see me conveying the message in a similar kind of body language, not adding/subtracting from what was said."

Respondents identified additional patient expectations, such as providing medical advice and patient advocacy. One respondent noted, "Sometimes I think they want us to answer their questions. They forget that we are not the doctor." Participants mentioned that patients often want them to "be on their side" even though interpreters work for both the patient and provider. Finally, participants noted that patients often seek help navigating healthcare systems and asking questions or performing tasks the patients do not feel comfortable doing (i.e., making appointments, phone calls, etc.). This equates to many participants providing significant expectation management before and after the medical appointment – and their timed pay – ends. Expectation management includes setting boundaries for the patient-medical interpreter relationship. Boundaries may comprise, for example, reviewing questions which are better asked during an appointment with a doctor present versus while still in the waiting room with only the medical interpreter. Medical interpreters were compensated based on the time booked for an appointment. Any communication with a patient outside of an appointment time is often not captured in the books and therefore not compensated.

Interpreter Voices: Medical Interpreter Needs and Support Resources

Participants were asked how their employer could more effectively support them in their work, in which two major themes emerged: opportunities for continuing medical education and psychosocial support. Many participants desired further training in medical terminology and anatomy via webinars, workshops, articles, etc. Participants also reported often being unaware of the medical scenarios they are walking into – noting that they receive an address for the assignment and nothing more. Being unaware of the patient's condition and the type of medical service being rendered prevents the medical interpreters from supplementing their knowledge and vocabulary to feel adequately prepared. It also requires creativity and compromise on the part of the medical interpreter and patient, as encountered by one participant and a patient with explicit gender preferences. In this instance, a male medical interpreter was assigned to a patient who, for religious reasons, required only female individuals in the room. This occurred because the reason for the visit was unknown before arriving. As such, it was not known that a situation in which a male individual could not be in the room would arise. While this medical interpreter was able to face a wall during the encounter, they noted this would not have been a solution for languages that require sight, such as American Sign Language.

Regarding psychosocial support, participants relayed that they lack the necessary skills to navigate difficult medical situations and subsequently cope in healthy ways. Many participants endorsed the potential benefit of opportunities to share their experience with other interpreters and professional mental health providers.

DISCUSSION

This quality improvement project aimed to explore the experiences and needs of Global Wordsmiths medical interpreters using a phenomenology paradigm. Regarding the medical interpreter experience, there was a difference in beliefs among many participants regarding their job expectations. Some participants felt that providers and patients expected word-for-word translations conveyed with similar body language as the original speaker. This feeling is similar to the roles of both verbatim interpretation and health literacy guardians, meaning facilitators of patients' ability to understand information conferred by physicians, previously identified by medical interpreters involved in intensive care unit communications[6]. On the other hand, other participants felt they were often called on to provide medical advice and advocate on behalf of the patient, requiring significant expectation management outside of their paid time. The use of strategies outside of strict translation is similarly reported among pediatric oncology medical interpreters, who sometimes feel obligated to deviate from their role as a neutral party to interpret in a broader cultural context rather than carry out word-for-word translation[7]. Overall, this mixed understanding of the role of medical interpreters is consistent with their multitude of understood roles reported in the literature[5, 6]. This misunderstanding of responsibilities among providers, patients, and medical interpreters themselves may prevent medical interpreters from effectively contributing to the LEP patient-provider relationship to the best of their abilities.

Regarding the theme of supporting medical interpreters employed by Global Wordsmiths, participants acknowledged a need for more preparation prior to and psychosocial support following medical interpretation visits. All participants are nationally board certified or, if they interpret a language other than the 13 for which there is national board certification, have proprietary certifications from reputable bodies with proven coursework or experience in medical terminology and settings. Still, we identified a need for continuing education beyond this initial training, with suggested preparatory resources including anatomy and physiology training pertinent to the type of appointment for which the patient is being seen. This lack of adequate preparation prior to a service is echoed in a systematic review of several studies looking at medical interpreters involved in the delivery of palliative care services to cancer patients[9]. This review suggested that pre-meetings between clinicians and interpreters are important for discussing topics and terminology[9]. Knowing more specifics about an appointment beforehand gives the interpreter a sense of autonomy in their interactions, and they are more effectively able to prepare by becoming comfortable with necessary vocabulary needed to meet the expectations of both the provider and patient.

Psychosocial support needs took the form of the opportunity for experience sharing with other interpreters and mental health professionals. As integral parts of the caregiving team, medical interpreters are at increased risk for significant work-related stress, and the accuracy of their interpretations can suffer[10]. Similar distress and lack of coping resources have been endorsed among medical interpreters in oncology, and one study piloted a resiliency program targeted at the needs of these interpreters[10]. This pilot found that interactive exercises employing relaxation response elicitation techniques (i.e., breath awareness), restructuring negative thoughts, stress awareness, and empathy improved interpreters' ability to cope[10]. Applying this pilot's findings to our results suggests further implementation should include medical interpreters in other areas of care as well.

The findings from our sample reflect that medical interpreters overwhelmingly want to do what is right by the patient. This includes word-for-word translation, but also attending to the less often thought-of needs of the patient, such as patient advocacy, and the medical interpreter themselves, such as ongoing medical education and psychosocial support. While many may leave the experience of attending to these additional needs out of the medical interpreter job description, we argue that these aspects of the medical interpreter role are important because they can ultimately impact the quality of communication during patient encounters. This is supported by Rhodes et al.'s Alterations Theory Model, which was originally formulated in the setting of end-of-life discussions and builds off the idea that medical interpreters face the challenge of finding a balance between their "human" and "professional" roles[11]. In this model, Rhodes et al. list complex influences on medical interpreters' decision of whether to alter communication with a patient[11]. Some influences listed include the medical interpreter's self-care skills, preparation for the discussion topic, and relationship with the patient and provider[11]. While the default is not to alter communication, there are unintentional and, though rare, intentional alterations which stem from the emotional and professional challenges faced by medical interpreters[11]. As such, protecting the quality of the communication between doctors, patients, and interpreters relies on medical interpreters being employed at institutions that are responsive to and supportive of the additional elements of the medical interpreter role.

Limitations

This study is not without limitations. Our survey, developed as part of a quality improvement project, has not yet been reproduced. However, the questions were adapted from experienced sources and piloted by a former medical interpreter, leaving us confident in its potential to be adapted and applied elsewhere. Furthermore, responses were self-reported and subject to recall bias as many questions asked for reflection on specific examples. Lastly, our convenience and purposive sampling methods are vulnerable to sampling bias. Those at the emotional extremes in regards to their employment may have been more inclined to participate over others. Additionally, this study was conducted entirely during the COVID-19 pandemic, and eligible participants could have experienced poor internet connection among other barriers to participation.

Implications

Considering medical interpreters' vital role in ensuring adequate health care access, quality, and outcomes for patients with LEP, it is in the best interest of health literacy and public health researchers and practitioners to explore and address the factors which hinder medical interpreters from effectively performing their jobs. In publishing this report, it is our hope to inspire researchers and practitioners to further delve into the experiences and address the needs of their medical interpreter populations outside of those that work in high-stress settings. We encourage readers to adapt our survey and methods to best fit their population and continue exploring this invaluable profession.

CONCLUSION

Many themes elicited in our survey are shared among published work looking at the experiences of medical interpreters in high-stress situations[5-10]. While our population of interpreters encounter difficult situations during their work, the medical scenarios they most frequently attend are much less stressful. This suggests that the literature on medical interpreters in high-stress situations may be applicable to the profession as a whole. The presence of multiple roles outside of their defined responsibility to "just interpret" and the need for more psychosocial support significantly hinder medical interpreters' ability to positively affect health care access, quality, and outcomes among populations with LEP. As such, we have identified a vital need for health literacy research and practice to further investigate medical interpreters' experiences through projects similar to that reported herein as well as other endeavors.

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The Columbia University
JOURNAL of
GLOBAL HEALTH

Changes for a Better Health and a Better Nation: Policy Reforms in Spain Based on the Catalonian HiAP Model

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ABSTRACT Since the decentralization of the Spanish government, questions have remained concerning the development of policy that effectively impacts both regional and national populations. To accommodate this, Spain has developed an efficient socialized healthcare program. Due to the decentralization process, however, certain regions of Spain have developed far more advanced policy mechanisms than others. In particular, Catalonia steps outside the traditional roles of government oversight to forecast visionary policy and legislative techniques. Amidst the tug-of-war between willingness and resistance to implement healthcare policies that have a direct impact on improving the population's health and healthcare, Catalonia employs original thinking and innovation in policy using the Health in All Policies (HiAP) model to create comprehensive strategies. By integrating health into every policy put forth, Catalonia ensures decision-making that prioritizes citizens' health first and foremost. When all stakeholders are invested, better conversations can be facilitated to optimally avoid potential issues. Health, as this paper explains, is an aspect of life that incorporates all other socioeconomic factors. Policy changes must be introduced to improve communication and coordination on a regional and national level, thereby introducing horizontal, collaborative partnerships. The accountability that exists as a main tenet of HiAP limits the presence of the free rider issue in government at all levels. This paper demonstrates the need for nuanced conversations that compel policy-makers to collaborate in further advancing efficiency in socialized medicine.

KEY WORDS health policy, policy reform, healthcare, Spain, Catalonia

INTRODUCTION

Within healthcare policy there is continuous debate, manifesting in a tug-of-war between providing national healthcare and the ability for a region to be self-sufficient to accurately reflect its citizens' needs. Catalonia has been a pioneer in Spanish healthcare policy. Studying the success of Catalonia, as well as the intervening factors that enable such success, is imperative, serving as a model for Spain with applications to other countries. When healthcare is accessible to its citizens, there is increased systemic transparency and, in the case of Catalonia, increased life expectancies. The application of methods to integrate healthcare in Catalonia as a focus across all policies could enable improved healthcare standards and efficiency to a broader population in Spain and beyond.

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Not more than fifty years ago, Spain was held tightly under control of a conservative dictatorship. With heavy censorship, many citizens were deprived of access to personal liberties and rights. Since becoming a democratic regime in 1978, Spain achieved substantial health outcomes, with impressive decreases in mortality rates and increases in life expectancies as compared to other countries in the European Union (EU)[1-4]. Moreover, socio-environmental factors impact health, and policies can change health determinants across various national health systems. Health determinants are defined as "factors that are found to have the most significant influence on health" and are often influenced by factors outside the realm of medicine and strict healthcare, thereby affecting constituents[5]. For instance, in 2015 Spain had the highest life expectancy in the EU – an average of 83 years compared to that of the EU's 80.6 years. This is powerful as Spanish GDP health expenditure is less than that of the EU average[2, 3, 6].

These dramatic improvements are attributed to Spain's national healthcare system, which has made impressive strides for a shockingly low price tag. Spain spends 3.5 times less than the U.S. on healthcare, despite being a public system[7]. Due to systemic efficiencies, Spain has been considered a model for newly industrialized countries to create national affordable healthcare that addresses determinants[8]. Nonetheless, certain regions in Spain perform exceptionally more robustly by utilizing holistic approaches. Although Catalonia is not perfect in creating healthcare policy, it has assumed a singular approach based on an EU "Health in All Policies" (HiAP) model which has proven effective and drastically differs from methodologies of the rest of the nation. Spain, moreover, is intriguing due to its governmental structure affecting healthcare and policy-making. Policy-makers and healthcare officials in Spain and beyond should be cognizant of how a multi-faceted methodological approach can improve quality of life.

This paper aims to compile and explore an understanding of how Catalonia has exhibited optimal yet efficient healthcare outcomes. Examining current and previous approaches to policy creation mechanisms will illustrate a dynamic picture of the Catalonian model. In order to elucidate such factors clearly, officials in Catalonian and Spanish policy were consulted to provide insight. Thus, this paper aims to answer: How do the policy mechanisms in Catalonia contribute to improved health outcomes in the population?

To garner a brief conceptualization of this topic, this paper is contextualized within current policy mechanisms to evaluate the successes and flaws on both a regional and national level. Understanding the factors that have created an effective policy mechanism to improve health outcomes could empower further changes in health policy approaches. This paper is necessary to coalesce a narrative about and amongst policy creators in hopes of creating higher health standards for constituents.

The Spanish Context

After Francisco Franco's death, signaling the end of the Spanish dictatorship, the Constitution of 1978 established seventeen Autonomous Communities (ACs) that constitute Spain. Reforms implemented in this era focused on extending coverage to all constituents that previously had limited rights[9]. Healthcare was first implemented at that time and soon evolved into INSALUD, the plan for national healthcare[10]. INSALUD "recognize[ed] the right of all Spaniards to a healthy environment and adequate public health services"[11]. Article 43 of the Constitution defined healthcare as a right for all citizens with a commitment to equity, quality and participation[1]. The formation of healthcare and definitions set acknowledge a diverse population, a fine beginning to quality healthcare.

Until 2002, only seven of the ACs had full control over expenditures, levying taxes, and reallocation of funds. The other 10 ACs were under the jurisdiction of the national government due to lack of full self-determination. Setting a precedent, this methodology created a split in the methods of yielding power to the ACs. The first method was designated for those ACs that held a "self-governing tradition dating from before the dictatorship period or backed up by a strong regional identity"[12]. These regions include the Basque Country, Navarra, Catalonia, Galicia, Valencia, Andalucía and the Canary Islands. The other third of the Spanish population remained under INSALUD until 2002, which set a precedent for autonomy in certain regions. Furthermore, capacity-building took place in those communities due to earlier-achieved autonomy.

Nonetheless, all regions in Spain operate under the Beveridge Model of healthcare, similar to the United Kingdom, Finland and Sweden [7]. The Spanish healthcare system struggled from 2002 to 2008 due to changes in government power. It was not until 2008 when the Pact for the Health System was unanimously voted to make the Spanish National Health System (SNS) an issue above politics to bolster its cohesion[9]. After decentralization, each AC had the authority to regulate functions and provide for their population, deciding a healthcare budget without exceeding the nationally agreed limits[9]. By 2014, socialized benefits of healthcare covered 99.1% of Spain (with an opt out option for private health insurance). Nonetheless, Spain's healthcare system is complex and heavily steeped in bureaucracy. The intriguing aspect of this extensive bureaucracy is the vital role that primary healthcare (PHC) teams play in each zone of healthcare. Increasingly, attention has been given to the smallest unit of healthcare that can influence these outcomes and make the greatest differences outside the medical field [2, 13, 14]. A PHC system may improve health determinants at the regional and state level as they have been proven to be the root of success in health outcomes at all levels [2].

Moreover, Spain's central challenge is that it has faced difficulties in communicating across ACs as well as between regional and state sectors[15]. The decentralized system has additional challenges in developing common strategies for disease prevention and health promotion. Amongst the vast diversities of population and socioeconomic status (SES) in Spain, it can be difficult for government policy powers to formulate effective national policy. In 2015, most public expenditure (92.4%) was allocated to the SNS, which is subsequently run by ACs – demonstrating how decentralization can lead to uneven equity and growth[1, 2, 6]. Despite this, there are systemic differences across ACs. From the outset, there was significant ambiguity remaining in national policy after decentralization, which enabled the original, fully autonomous ACs to determine how to carry out distribution of healthcare for their respective populations[8, 15-17].

Current Documentation

What are the driving forces that have led to such incredible efficiency in healthcare and a greater capacity building for healthcare in Spain? Over the last decade ACs have undertaken various initiatives to improve healthcare and diversify their policies in order to accurately reflect their region's populations[15]. In 2009, Spain as a nation invested 8.3% of their GDP in healthcare, which is below the average of most EU members. Moreover, the per capita expenditure is also substantially lower than the EU15 average [9]. These expenditure trends have been maintained over the last decade, demonstrating efficiency in healthcare policy implementation. A study by the OECD demonstrated Spain was well above the average life expectancy, gaining four more years of life [18]. As such, Spain is considered at the frontier of efficiency in socialized medicine. Additionally, Spain has had negative health spending growth [18]. This contributes to its ability to utilize money in an effective manner that serves the population.

Spain has implemented broad policy reforms such as the National Strategy on Chronic Conditions and anti-tobacco policies. Nevertheless, health is lacking as a priority in policy. While Spain excels in many healthcare outcomes, certain issues have remained stagnant or unaddressed over the last decade[3]. Decentralization and capacity-building meant that inter-AC tensions grew over uneven growth rates and health expenditures [5]. In addition to these tensions, many patients and citizens have a "weak 'sense of belonging' to their authority or community, other than their local doctors" [19]. This sentiment proves that while the championed PHC programs have been successful in establishing ties with the community, patients and constituents feel isolated. Research has demonstrated a need to modify and reform policy steeped in bureaucracy, while also providing alternative, novel treatments that extend past traditional pharmaceuticals[6]. Therefore, policy is proposed based on the Catalonian model to improve such issues and propel countries towards innovative solutions in healthcare.

Specifically, through their autonomous capacity, Catalonia has declared an investment in the Health in All Policies (HiAP) European model and utilized the 17 Sustainable Development Goals as part of the 2030 Agenda for Sustainable Development published by the United Nations General Assembly in 2015 [20].

Health in All Policies Origin

In a European context, HiAP examines health on various levels to "improve health and, at the same time, contribute to the well-being and the wealth of the nations through structures, mechanisms and actions planned and managed mainly by sectors other than health"[5]. Public policy is a necessity to change population behavior and ensure the safety of constituents. HiAP has been discussed for multiple years in the EU and in international contexts, where it has been acknowledged as a necessity for interaction across many sectors of government, including nutrition, transport, education, etc. It was first implemented with success in Finland[5]. The policy is defined by the "horizontal, complementary policy-related strategy" it employs to improve population health, thus extending to other sectors of government[21]. Moreover, at the core of HiAP is the concept that all levels of governance are intertwined and required to reach as much of the population as possible, thereby positively altering outcomes and lifestyles. By using this strategy, policies that incorporate many different sectors can reduce health inequities.

Why is HiAP relevant in a general context? Inequalities in health extend beyond SES and can be seen as a gradient that extends through SES[5, 22]. Therefore, policies must reflect all types of people within a nation's borders. There are a multitude of policy considerations and processes in coordinating efforts from sectors of society to accomplish desired health outcomes. As such, HiAP is one of the few models that aptly emphasizes the complexity substantiating socioeconomic health, allowing for more informed policy-making[5, 23].

Nevertheless, there are challenges to holistic approaches in designing policy, such as motivating policy-makers in other government sectors to incorporate health where they may not have been previously willing to add this priority[5]. Policy-makers outside the healthcare sector may not understand the benefits of health integration and may not realize the necessity to promote health. Therefore, efforts are needed to align motivations and objectives in order to fulfill the health needs of the population.

The Successful Heath in All Policies Model in Finland

HiAP was first successfully implemented in Finland and has been subsequently implemented in other countries. This use of HiAP by Catalonia in particular exhibits the adaptation of the model from Finlandto fit another population's own needs. The HiAP model has been effective in lowering obesity and fighting cardiovascular heart disease (CHD) in Finland.. In the 1970s, the Finnish government launched the North Karelia Project to combat high CHD mortality rates. Finnish men experienced more than 700 deaths per 100,000 people, a mortality more than 100 deaths per 100,000 greater than that of 24 other countries studied[5]. Along with cooperating with experts on the local and national level and utilizing resources from the WHO, the project implemented "carrying out systematic and comprehensive intervention using epidemiological and medical knowledge on cardiovascular risk factors and applying relevant principles of behavioural and social sciences on their background factors"[24]. With the backing of multiple resources, Finland also rolled out intersectoral collaboration to strategize health planning and public health policies. In accordance with the philosophy behind HiAP, the project addressed the prevalence of smoking,cholesterol, and blood pressure levels in the population – focusing on men – and prescribed lifestyle changes to smoking and dietary behaviors. For implementation, the new policy was integrated alongside previously existing policies. Studies had shown that simply supplying the population with health information did not affect the high CHD mortality rates[23]. Thus, why did Finland turn to this approach?

To combat the previous failure of merely disseminating health information, local authorities worked alongside manufacturers in the food industry to develop better food products and mandate public areas as smoke free. The Finnish government improved school lunches and raised public awareness in the media while also engaging both the community and local authorities[5]. Through this comprehensive approach, risk factors decreased substantially while also cholesterol levels and diets improved – both in men and women. The project worked to improve"general risk-related lifestyles in the area through community-based action that included not only preventive services…but also worked with many community organizations,…the private sector, and political decision makers"[25]. As a result, the region revitalized all aspects concerning health, illustrating a new process of transversal policy making.

The drop in CHD mortality was most shocking. In North Karelia, the mortality rate decreased by 82%. Even more impressively, the policy changes extended to the rest of Finland as well. Over a span of thirty years – from the initiation of systemic change in the 1970s through 2002 – the CHD mortality rate decreased across Finland by 75%[5]. These cutting-edge initiatives are astounding and are considered some of the fastest observed in any country. When considering the amount of policy revamped and implemented in such a number of regional, local, national, and international levels, it becomes apparent that the emphasis on implementing HiAP strategies guaranteed this change. Furthermore, another study demonstrates that the changes in health and determinants of health extended beyond addressing CHD mortality rates. Life expectancy increased by 10 years alongside major improvements in diet. For instance, among other changes, compared to the 90% in 1972, only 5% of the Finnish population used butter on bread in 2009[23]. This demonstrates the improvement of health determinant outcomes that can occur with intersectoral reforms and with support from many areas and levels of government. Such an all-encompassing model has been brought to Spain by Catalonia and adapted based on the successes seen in Finland[20].

Catalonian HiAP Model

One path of the HiAP model that has been implemented in Catalonia has been actualized as Pla interdepartamental i intersectorial de salut pública (PINSAP), first introduced through the passing of Law

18/2009 in 2009[4, 26]. PINSAP stresses the importance of developing policies that prioritize health and improving lives from multiple standpoints, and it is the actual mechanism for HiAP implementation. In 2016, the Catalonian government approved its legislature to incorporate a National Sustainable Development Goals Plan and ensure that the targets listed in the 2030 Sustainable Development Goals agenda are incorporated in Catalonia[20, 27]. PINSAP seeks to optimize the health of the population through the creation of public health policies and initiatives designed for health promotion. Its main focus is on emphasizing the role of governance for health at different levels rather than a generalized Catalonian health care.

The region has successfully managed to unify various sectors of government from a health perspective. Public health was made a priority and unanimously voted in in Law 18/2009[4]. HiAP is a collaborative method, involving all parts of the population – regardless of socioeconomic background – in government action and policy making to more accurately serve the needs of said population and diminish the gaping chasm caused by societal inequalities. Backed by WHO and other NGOs, the most up-to-date PINSAP includes five objectives for implementation. First is the priority to engage all levels of government and society to positively influence health. This objective also follows the 17 Sustainable Development Goals to ensure sustainability and equity. Next, PINSAP looks to coordinate efforts amongst department plans on all levels. Third, PINSAP acknowledges the individuality of the different zones within the region and encourages utilization of PINSAP resources in each zone that best reflects the needs of that area. To achieve these goals on a national level, the Interdepartmental Health Commission was introduced and helped stimulate PINSAP usage to reduce inequity. On a regional level, many advisory territorial councils have been involved in deploying PINSAP. In the local territories, PINSAP operates through different community health projects championed by local authorities. With this in mind, the next objective of PINSAP is bolstering community health projects to improve *all* communities within Catalonia[4, 27].

An important aspect of the Catalonian government, or GenCat, to highlight is its role in taking primary responsibility in healthcare promotion. GenCat has become the ‘go to’ comprehensive resource for citizens in all realms pertaining to health and fitness, based on existing policy mechanisms. For healthy recipes, information on outdoor fitness centers and gym locations, and information on infant health and public transportation, GenCat is an easily accessed resource. The PINSAP mechanism and prioritization ensures education is widely distributable. PINSAP encourages “all the sectors of the Government, of the public administrations Catalans and society [to] capitalize directly on their health and health influences well-being associated with health, in order to contribute jointly to developing public health policies and to develop promotion and health protection initiatives, particularly those aimed at the most vulnerable groups in society”[28]. Currently, PINSAP has 10 priorities, including environment, obesity, mental health, active lifestyle, and consumption of drugs, among others. These objectives are based on the priorities of WHO, 17 Sustainable Development Goals, and the idea that complex (‘wicked’) problems that require intersectoral approaches.

Policy Translated to Successful Program Outreach

Currently, Catalonia employs seven territorial councils, more than 708 professionals and 177 entities. To promote a healthier Catalonia, over fourteen programs have been introduced This policy paper focuses on the HiAP model extending to PINSAP due to the breadth and depth of the program implemented in Catalonia. As mentioned in the *The Catalonian Health in All Policies Model*, PINSAP has been implemented since 2009, and is in its second revised model after the first phase’s success[4]. One of the most impressive reforms is the nutrition program. Out of twenty-eight countries that have implemented sugar taxes worldwide, Spain ranks ninth in regulation.Specifically, Catalonia passed Law 5/2017 to regulate sugary beverages[2]. Furthermore, studies have demonstrated the success of a Mediterranean-based diet[27, 28]. GenCat, through the program coined “AMED,” has aided in the accreditation of 561 establishments in 134 municipalities and 95% of hospitals to incorporate a Mediterranean diet. An intriguing aspect of the program is the cafeteria component for schools and factories[29]. Through governmental encouragement and implementation of healthier meals in such settings, the lifestyles of children and factory workers have been improved with more nutritious options[G. Miranda, G. Salvador, personal communication, May 31, 2019].

Additionally, another tenet of the nutrition program is the concept of “Más, Cambia a, Menos,” or, “More, Change to, Less,” which is in accordance with the policy instructed by the 17 United Nations’ Sustainable Development Goals. Branded as “small changes to eat better,” this beneficial and instructive information simplistically educates on nutrition to ensure citizens can easily understand and improve their dietary habits. In the online 84-page extended version, the nutrition recommendation guides people on which foods to eat and when, as well as why these foods are important to a diet,, how large a portion size is, etc.[30, G. Miranda, personal communication, May 31, 2019]. Verified scientific studies are sources for each food listed with resources for further information, facilitating a conversation of the power of placing health first. This policy and its philosophy has positively changed nutritional outcomes for school children and factory workers.

Another policy mechanism influenced is the prevalence of medications as a treatment as opposed to alternative methods. According to The Physician and Sportsmedicine Journal, “Studies have demonstrated the benefits of exercise in the treatment and prevention of most every common medical problem seen today”[31]. Therefore, PINSAP has encouraged doctors to prescribe exercise as a form of treatment for certain diagnoses. This activity-based prescription has manifested into a program called FITjove, with pilot programs in 11 Catalonian municipalities. Additionally, this idea exists outside the healthcare sector and is promoted in the “social prescription” program where “social activities and community participation are prescribed to promote quality of life with positive mental health”[C. Cabezas Peña, personal communication, May 29, 2019]. To bring this to action, 100 professionals have been recruited and a guide generated. Moreover, GenCat works with the social environment and public zoning sectors of government to build free outdoor gyms and public spaces to further promote awareness, accessibility and population engagement[29, C. Cabezas Peña, personal communication, May 29, 2019].

From PINSAP policies that extend from the Catalonian government to the localized programs that are horizontal in measure, healthcare outcomes have vastly improved across multiple sectors. According to **Table 1**, life expectancy has improved, along with the mortality rate per 1000 habitants, and tobacco consumption. Nevertheless, there are certain key issues that languish, such as obesity. Obesity is influenced by many factors including social and environmental effects[26]. In response to this weight epidemic, the Catalonian government has responded on multiple levels - introducing taxes on certain unhealthy foods, improving public transportation, increasing education and working alongside architectural authorities [C. Cabezas Peña, personal communication, May 29, 2019].

Although the Catalonian government recognizes prevailing health issues to overcome, the HiAP impact on health determinants and outcomes has had perceivable momentum. Due to this holistic approach and evaluation, Catalonia has addressed both causes and effects by extending beyond the conventional scope of healthcare. Across governmental structure, while Catalonia has a direct dialogue amongst its governmental decisions, Spain still does not have that organizational communication channel[A. Alemany, personal communication, June 17, 2019].

TABLE 1. Comparison of Health and Life Quality of Catalonian Population 2013-2016

	Year	Both	Male	Female
Life Expectancy	2013	83.2	80.2	86.0
	2014	**83.4**	**80.5**	**86.1**
Life Expectancy with Good Health	2013	68.1	67.3	68.8
	2014	**68.4**	**67.9**	**68.8**
Perception of Bad Health	2012	17.25%	12.8%	21.6%
	2016	**16.6%**	**13.7%**	**19.3%**
Mortality per 1000 Habitants	2013	5.3	7.1	3.9
	2014	**5.2**	**6.9**	**3.9**
Avoidable Mortality per 1000 Habitants	2013	65.8	90.1	42.4
	2014	**66.6**	**90.2**	**43.8**
Tobacco Consumption	2012	28.5%	34.2%	22.9%
(Daily and Occasional)	2016	**24.7%**	**29.0%**	**20.6%**
Consumption of Alcohol Risk	2012	3.9%	6.0%	1.7%
	2016	**4.5%**	**6.9%**	**2.2%**
Overweight and Obesity in Adults	2012	49.0%	57.7%	40.1%
	2016	**49.3%**	**57.4%**	**41.0%**
Adults who are Sedentary	2012	17.8%	16.4%	19.2%
	2016	**22.6%**	**21.0%**	**24.2%**
Psychological Wellbeing	2011	58.4	59.0	57.8
(Rating from 14 to 70)	2016	**58.1**	**58.7**	**57.6**

Note. Translated by the author from *Amb tothom sumum salut,* by PINSAP and Generalitat de Catalunya, 2017. Bolded indicates more recent data outcome.
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HEALTHCARE POLICY RECOMMENDATIONS

Spain

It is no secret that, with the exception of three healthcare benchmarks, the Spanish healthcare system excels in the world, far surpassing the EU standards and averages. Despite an economic crisis that stifled world economies and healthcare funding in 2008, Spain's efficiencies in spending allowed health coverage to extend to 99% of the population in as early as 2009 [9, 32].

If the SNS remains at the status quo, it is a missed opportunity to extrapolate Catalonia's effective policy initiatives thereby improving citizens' health. Madrid has attempted to play catch up for the past decade to centralize all medical documentation to streamline doctors' access to patient records to better patient health outcomes, thus trying to reduce cost inefficiencies. As a comparison, Catalonia has had this technology functioning for at least the same amount of time (G. Miranda, personal communication, May 31, 2019; A. Alemany, personal communication, June 17, 2019), which has created streamlined health for its citizens. More recent reforms have yet to address root causes of issues that would improve the SNS[2]. Changes must be more than simply a Band-Aid in order to better reflect the population within the policy system.

Extrapolation to Other Countries

A HiAP approach would better enhance healthcare systems by prioritizing health, engaging the local community and augmenting win-win strategies. Already, it has been successful in a number of smaller countries and settings, demonstrating with the appropriate approach how it could be integrated into a larger system[5]. For a step in this direction, it is necessary to introduce or revise health reporting systems to understand precisely where regions are lagging concerning health outcomes thereby bolstering the ability to better provide resources at the regional and national level to fix these issues. Although for some socialized systems, where the onus of care is the government's responsibility, attaining the next level in health outcomes could require a significant upheaval due to current status quo in policy perspectives, a HiAP approach could be what is necessary in order to sustainably bridge science, care, and policy. Thus, HiAP will improve outcomes by enabling the system to predict health outcomes and consequences of policies thereby reducing the amount of trial and error[5]. At its core, this type of policy institutes changes designed to improve constituents' lives. This can be achieved by aligning future policy reforms to the 17 Sustainable Goals and 2030 EU agenda as well as relying on other resources such as the WHO or other NGOs.

Understanding Health as a Priority

The first measure of implementation towards a better healthcare system is aligning the vision and actions of policy-makers, plus underscoring prevalence of healthcare in policy decisions. It has been found that when health, and healthcare, is improved, education is more readily accessed, income security is improved, and unemployment and social exclusion is reduced among other affected external factors[5]. In order to garner support for prioritizing healthcare, horizontally-structured intersectoral public health committees should be explored for implementation. Catalonia employs such committees, thereby facilitating open communication across sectors [G. Miranda, G. Salvador, personal communication, May 31, 2019].

When government policy does not prioritize health, other sectors of government are negatively impacted[33]. In contrast, Catalonia has prioritized health due to early adaption of thoughtful, holistic policy along with policy experimentation, which enhanced capacity-building in the region [9]. In examining another country, Wales, for instance, officials utilized videos with the HiAP message to reach multiple levels of government and constituents[5]. Another instance utilized in other countries are "Health Days" to increase awareness about health issues while also involving the local industries [34]. With more communication and inter-involvement amongst sectors, the issues that face each sector can be raised, rallying new and different perspectives towards solving issues on regional and national levels. Additionally, by incorporating multiple governmental sectors in the conversation from the beginning of policy-making processes, overlooked issues could be diminished that usually become pronounced long after resources are too drained to fix them.

Win-Win Strategies

Although difficult to coordinate and devise policies that benefit multiple governmental sectors, such stratagems are imperative to functional and thriving policies. Policy -makers must take into account the agenda of each stakeholder, shared objectives and what instrumentation is available for operationalization[5]. Of course, this step is built on respect amongst policy-makers and within government, with knowledge that a reciprocal relationship is beneficial in various capacities. Policy-makers that influence healthcare must recognize other powers in government, realizing those interests and encouraging key players to stake claim in improving healthcare. Furthermore, without each conciliatory shareholder contributing to improve healthcare policy, or if certain agents act as free riders by reaping the benefits without aiding themselves, HiAP will fail. Therefore, accountability is paramount to success.

Prevailing Challenges

Although the HiAP model is an optimization technique to institute beneficial change in Spanish and other countries' healthcare systems, there remain healthcare and logistical issues paralleled across both countries that must be addressed. If HiAP were executed on a national level, it would require the willingness to coordinate human resources and the planning of fiscal resources. Such a holistic process depends on the quality of the investment in such a policy and therefore needs contribution on both vertical and horizontal planes of government and power. The tenets of HiAP acknowledges and works with prevailing inequities, but may be difficult to sustain on a grand scale. While it has been successful in a number of regions, larger health systems are often entrenched in a battle of delivering healthcare [35-37]. Without implementation, Spain and other countries could be inhibited from elevating citizens' health to its highest potential[36, 38]. Addressing this possible obstacle requires the continuous support of transverse communication and an intersectoral government system. Through these implementation techniques, HiAP can be realized and successful in serving populations.

CONCLUSION

In conclusion, the main tenets exhibited of PINSAP in Catalonia and HiAP are the cross-section and integration of central elements which include policies and key players from the most local level, to municipalities, to all the way up to the national level and beyond [6]. Nonetheless, policies cannot be successful locally unless there is support at a regional, national and/or international level. Reciprocally, policies cannot be successful in a broader schema unless adapted and supported in local communities. A policy-making process that addresses this and incorporates such a framework will be far more effective. Moreover, holistic and proactive policy decisions save resources, thereby increasing efficiency.

These lessons can provide directionality for multiple countries' healthcare systems. A recent study funded by the Bill and Melinda Gates foundation demonstrated that despite GDP expenditure on health, there can still be variability in the success of a healthcare system [39]. If countries can employ a model working across sectors and championing its population's needs, citizens will have a better quality of life, translating in all aspects of life including increased productivity.

Championing policy structures based on the Catalonian HiAP model will increase dialogue surrounding health's pertinence. A reformed policy-making process will materialize involving efficient coordination tactics, where key components are integrated during policy-making processes. Ultimately, decentralization and a HiAP model allows optimal experimentation, evaluation, planning, communication, efficiency, and policy decisions that directly involve and reflect the population and ultimately uplift the national healthcare system. The priority for Spain and other countries' policies focus on many different levels, thus addressing all elements of healthcare. By no means will inequities in determinants and the persistent absence of health prioritization in some countries nor the lack of communication that has been the status quo of a decentralized Spain will be substantially improved overnight. Each country must act to have a successful policy process where all shareholders can and will contribute, benefiting from the win-win strategies. In summary, in order to facilitate a holistic process across all sectors from the individual citizen to the national government, healthcare systems must extrapolate the visionary and efficient Catalonian healthcare policy to subsequently be successful in implementing life-improving health outcomes.

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ORGINAL
RESEARCH

The Columbia University
JOURNAL of
GLOBAL HEALTH

Barriers and Challenges of Immigrant Women’s Access to and Experience of Optimal Maternity Care

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ABSTRACT With an increase in immigrant populations, healthcare systems are experiencing a new wave of ethnic-cultural diversity among patients. For the 48.1% of women among global migrants, maternal healthcare services are often the first level of contact with new healthcare systems in countries of resettlement. However, immigrants face many barriers, including socioeconomic and language considerations. As maternal care requires frequent contact with health care services through all stages of pregnancy, ensuring the quality of care is important to protect maternal and infant health. Using a systematic review method analyzing 17 articles from PubMed and Google Scholar in the past 20 years, three overarching themes were identified: lack of access to prenatal care, cultural insensitivity during in-hospital settings and challenge in identifying and experiencing postpartum depression. This literature review reveals the broader influences and contextual variables in maternity care and highlights problems relating to the acceptability and accessibility of maternity services for immigrant women. Overall, this paper reveals the importance of considering immigrants’ socio-cultural context of childbirth practices, creating more accessible prenatal classes and addressing disparities in postpartum depression. This knowledge can better inform health services delivery and formulate health promotion strategies to address discrepancies in maternal health outcomes.

KEY WORDS Immigrant women, maternal healthcare, prenatal care, postpartum depression, in-hospital care, barriers

INTRODUCTION

In an increasingly globalized world, women constitute 48.1% of the global international migrant stock [1].

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However, language barriers, lack of access to services and socioeconomic and political marginalization make relocating and navigating an unfamiliar environment difficult for many immigrants [2]. The vulnerability of immigrant women can be further exacerbated by pregnancy and childbirth, making maternity an important area of attention for enhancing immigrant health. In the U.S. alone, immigrants have accounted for almost one-fourth (23%) of newborn babies [3]. In turn, maternity care is often among the first forms of contact with new healthcare systems. Consequently, healthcare workers are providing care to an increasingly diverse patient group. However, immigrant women are more likely to risk poor pregnancy outcomes compared to native women: 43% higher risk of low birth weight, 24% of pre-term delivery, 50% of perinatal mortality and 61% of congenital malformations [4].

The significant hurdles can explain the disproportionate health outcomes in accessing services and receiving optimal care relating to transportation issues, limited financial capacity, language and health literacy [5]. However, one of the biggest challenges is the availability of culturally sensitive maternity care that accommodates the needs of immigrant women, who may bring embedded cultural values to their receiving country. Medical scholars and researchers increasingly recognize that culture plays a large role in determining health perceptions and practices [6]. This is notably manifested in childbirth, a significant period often marked by celebratory rituals and varying traditional practices. [7]. However, healthcare systems often ignore or devalue cultural needs, resulting in mistrust and misunderstandings between patients and health providers [2]. With a larger portion of foreign-born mothers utilizing maternal healthcare services, it is critical to evaluate and identify potential contributors to disparities in access, utilization and delivery of maternal care.

This literature review will bring together the myriad childbirth experiences of immigrant women and their access to maternity services in their corresponding geographical area, as they have been discussed in the literature so far. This paper will then answer the questions: 1) How can immigrants' access to and experience in maternity services be described?; and 2) What role does culture play in childbirth practices, and how do practitioners and healthcare infrastructures receive their needs? The review used the World Health Organization's (WHO) definition of maternal health as "the health of women during pregnancy, childbirth and the postpartum period" in addition to the definition of "immigrant" as proposed by the United Nations: "a person who has settled permanently in another country." Specifically, this paper examines those who have re-established a new residence in a Western industrialized country. The primary countries of investigation include Norway, Canada, Sweden, the United Kingdom and the U.S, as they are popular countries for migration. While previous quantitative studies have explored case studies of certain immigrant populations, to date, there are few systematic reviews investigating the lived experiences of pregnant migrant mothers for stronger evidence-based knowledge. However, synthesizing the broad commonalities across different immigrant groups is essential to identify key challenges and gaps in strategic health interventions. By reviewing sociological literature published in the past 20 years across 5 countries, this paper highlights the common challenges immigrant women face in accessing prenatal healthcare, cultural insensitivity in in-hospital delivery and postpartum depression.

MATERIALS AND METHODS

A systematic literature review methodology was used. An initial scoping search was made of PubMed, Google Scholar, NIH, and ScienceDirect for studies from the past 20 years. The following keywords were used in various combinations: 'immigrant women,' 'birth,' 'cultural practices in childbirth,' 'cultural diversity,' 'prenatal care' and 'disparities,' which produced (n= 762) relevant papers to be screened. Through a PRISMA flowchart (see Figure n=1), the papers were first scanned for relevance using the title and then assessed through the abstract to examine the paper's research objectives. Finally, through the process of exclusion criteria, full-text scans were performed to determine the quality and validity of the studies. Evidence compiled from quantitative, qualitative and mixed-review studies, consisting of interviews, questionnaires and surveys of immigrant women and healthcare providers, were considered to answer the research questions.

Inclusion criteria were studies focusing on 1) the maternity care needs of immigrant women, studies examining 2) immigrant women's experiences of pregnancy in the pre-, intra- and postnatal period and experiences with maternal health services provided by new home country, 3) peer-reviewed articles published in English and 4) studies focusing on women's experiences through the perspective of health care providers. Exclusion criteria were 1) grey literature, publications in a non-English language, 2) studies of the experience of ethnic minority patients who are not explicitly reported as immigrants or refugees, 3) studies not performed in included countries primarily to narrow the focus of the paper and 4) research solely focusing on cultural birth practices without investigating how these beliefs are received and the experiences of immigrant women in a clinical setting. 17 articles were included in the study.

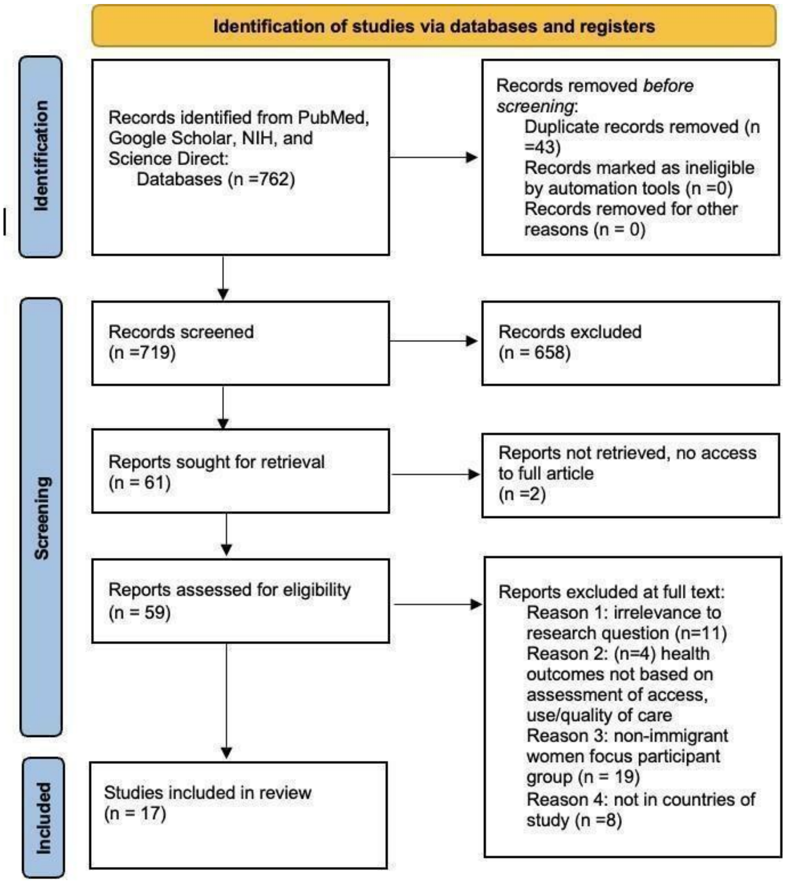

FIGURE 1. PRISMA flow diagram detailing the search and selection process of 762 records evaluated in this systematic review

RESULTS

Lack of Access and Utilization of Prenatal Care

Prenatal or antenatal care is defined as preventative healthcare comprising a regular series of clinical visits and checkups before delivery. Health information is particularly critical during this time due to significant physical and psychological changes women may experience and concerns surrounding the fetus' health. However, immigrant women receive inadequate or postponed prenatal care and attend fewer appointments and antenatal classes. For instance, a study conducted in London found that out of 29 immigrant women, only 5 (17%) had their first antenatal appointment before the recommended 10 weeks gestation as opposed to 28.2% of the general non-immigrant women population. The deficiency of antenatal care is particularly disconcerting, as immigrant mothers who do not receive prenatal care are four times more likely to give birth to low birth-weight infants and seven times more likely to experience preterm births [8] A predominant factor contributing to this issue is the lack of awareness of available antenatal classes. A study of immigrant Muslim women living in St.John's, Canada reported that some immigrant women were not told about the classes or did not understand their purpose [9]. Yet, even when utilizing prenatal care, language barriers still pose a primary challenge in comprehending medical information and communicating pregnancy complications. Immigrant women often lack proficiency in the main language of the resettled countries. Many antenatal classes are offered in English, leaving women without an adequate understanding of procedures or the promotion of healthy pregnancy [10]. In a study of 401 immigrant women in Norway, one-third (33.4%) reported a poor understanding of the information, and two-thirds (63.3%) of women would have understood information during maternity care better if offered in another language [11]. Similarly, a questionnaire with 83 participants in the UK confirmed the scarcity of language resources despite the emergence of Polish, Somali, and French-speaking communities as well as an inadequacy of interpreters [10].

However, despite the recommended standards in providing interpretation services, only 19% of the women who needed interpretation were offered it in the Norwegian study [11]. Moreover, many women reported insufficient coverage and a lack of readily available information on maintaining a healthy pregnancy and, thus, had to seek help from family and friends instead [11]. Previous research has linked low language proficiency to low attendance in pregnancy preparation courses [12].

Other factors, including lack of transportation, health insurance and low socioeconomic status, contribute to the absence of prenatal care and continuity in care [13]. Prenatal care often requires women to visit physicians regularly, which poses a challenge for women working in extensive jobs and without reliable transportation [14]. Additionally, concerns about legal status, particularly among asylum seekers and refugees, can perturb their willingness to register with maternity services in fear of deportation [15]. Notably, all these factors play a role throughout the whole trajectory of maternal care but are more prominently manifested during the prenatal period. The studies point to the need for accessible prenatal classes offered in convenient locations in the languages of the immigrants. Further investigations are needed on existing migrant-specific prenatal care programs and their effects on prenatal care utilization.

Cultural Incongruence and Different Expectations of Childbirth Delivery and In-Hospital Care

Aside from language and access barriers, issues often arise when immigrant women bring in diverse beliefs during in-hospital settings that differ from standard medical practices. A consistent theme found throughout the studies is instances of misunderstandings between immigrant women and HCP, with immigrant women often reporting their cultural practices are ignored and devalued. For instance, multiple studies highlighted a broad theme especially pertinent among Somali immigrants over fear of cesarean section: A study with 34 Somalian women who have migrated to the U.S found that 75% of participants expressed aversion to cesarean section, with 22 describing worry or fear of cesarean section [16].

Considering labor as best left to run its natural course, many Somali women may consider cesarean section as not waiting for God's help. However, many participants in the study felt that U.S. clinicians were more likely to introduce medical interventions to hasten delivery, which clashed with the women's reliance on God's will regarding the delivery time [16]. In another study with 432 Somali women, cesarean section was wanted by less than 1% of women but was experienced by over 50% [17]. This desire to avoid a cesarean birth may explain why many Somali women delay going to the hospital when in labor, resulting in chaotic and frustrating experiences for both laboring women and HCP [18]. Another area of misunderstanding is female genital mutilation (FGM). In many countries, predominantly in Africa, genital mutilation, or the total or partial removal of the female external genitalia or other injuries to the female genital organs, is a common practice [19]. Although this practice can contribute to complications during pregnancy, female genital mutilation is an important culturally-ingrained ceremonial rite of passage for many women [19]. Its prevalence should not be dismissed. The WHO reports that up to 97% of Somali refugee women who immigrate to Western countries have experienced type III infibulation, considered the most severe form of FGM [19]. However, women with FGM felt disrespected and negatively judged: in a study with 432 Somali women, 87.5% reported hurtful comments being made by their caregivers, including verbal expressions or surprise when the perineum was exposed to doctors or regarded with disgust [17]. 40.5% expressed that their nurses were highly insensitive to the particularly acute postpartum pain they experienced. Only 33.1% reported that their doctor had not avoided exposing their perineal area unnecessarily during labor [17]. Based on these results, changes in practice and clear guidelines are needed to treat women who have experienced female genital mutilation.

Additionally, women's religious and cultural beliefs shape their choices and preferences for HCP. For instance, in some religions, it is taboo to be treated by the opposite gender. A study found that among 6 Muslim immigrants interviewed in St. John's, Newfoundland, all participants expressed a strong preference for having female attendants care for them during their labor and delivery [9]. However, even with a female birth attendant, immigrant women are not always protected from negative attitudes from female care staff. A study with Somali immigrants corroborates this: many immigrants felt that midwives held stereotyped and negative attitudes toward them [20]. Many women also found their requests denied when it came to certain rituals and practices after delivery. In a Norwegian study with 401 immigrants, one woman who asked to pierce her infant's ears was denied by health personnel for concerns of causing pain to the child. Another woman who wanted to perform a traditional Islamic 'adhan' birth custom was rejected for fear of impairing the infants' hearing [21]. Dietary accommodations were also limited: Some cultural norms practice consuming certain temperature-level food and beverages to ease the healing process. However, in a study with Punjabi women in Canada, several reported challenges in their hospital stay, because they were not served hot food and instead provisioned cold foods like Jell-O, sandwiches and salads by hospital staff [22]. This experience is similarly shared amongst Chinese migrants, who may consider ingesting cold foods and applying ice packs after birth a traditional taboo. However, many were given cold beverages after birth [23].

Many maternity professionals similarly recognize that the maternity system caters predominantly to the homogenous white, middle-class pregnancy experience [10]. Another study from a healthcare provider perspective offers insight into how legal restrictions and regulations can make it difficult to adhere to immigrant's requests: For instance, some women request burning or eating the placenta, but in Quebec, placentas are stored in the hospital for safety reasons [24]. Consequently, frequent misunderstandings between competing beliefs can fuel prejudice that handling these patients is too "difficult," funneling the cycle where immigrant women feel discriminated against and have their needs ignored. For instance, midwives in the Norwegian study explained how recommendations for physical activity level after birth differed from some women's expectations from their birth country, potentially contributing to the perception of immigrant women as lazy and less cooperative [21]. These findings all point to the importance of cultural humility among HCPs when treating immigrant women who often come with their own cultural understanding of childbirth practices. This is an important area to discuss, as mistrust and cultural insensitivity in healthcare services can affect the utilization and quality outcomes of health services.

Challenges in Identifying and Treating PostPartum Depression

Postpartum depression, defined as the experience of depressive symptoms such as feelings of sadness and helplessness and loss of energy typically within the first three months after birth, can occur among many women [25]. Past research has linked the stress of migration with the experience of PPD. For instance, a Canadian study reported postpartum depression was five times more likely among immigrant women [26]. Recent immigrant women had significantly higher rates (6%) of depressive symptoms at 16 weeks postpartum than Canadian-born women (2.9%). Asylum-seekers had the highest rate (14.3%), followed by refugees (11.5%) and non-refugee immigrant women (5.1%) [26]. One possible explanation as raised by literature so far for these differences is that asylum seekers may experience more uncertainty and stress related to their immigration status, which can contribute to feelings of isolation and lack of social support [27]. Additionally, asylum seekers may have limited access to healthcare and other resources, which can exacerbate mental health problems such as PPD [27].

However, several barriers stand in the way of accessing treatment. In many cultures, terminologies like postpartum "depression" and symptoms of "depression" are not explicitly recognized, creating a challenge to diagnose and address the issue. A qualitative study of South Asian immigrants revealed struggles to find explanations and express the types of PPD thoughts and mood changes [28]. Instead, many women may attribute symptoms as products of situational stresses. Indeed, the migration process triggers enormous stress and emotional upheaval. Financial and work burden can make immigrant women and their partners less available to provide care to their child [29].

Additionally, a lack of connection to a family support system compounded with challenges while moving to a new country can contribute to worsened postpartum depression and feelings of isolation [26]. While in home countries, women can turn to parents and siblings for assistance, but being alone in a country without a sense of security can feel particularly disconcerting in handling the challenges of providing care for a newborn [30]. Specifically, many immigrant women in Canada noted the difficulties of successfully obtaining visitor visas for family members from abroad to provide support during this critical period [23] Not only do women express a lack of understanding of PPD, but a culture of guilt and fear attached to PPD can also prevent women from seeking help. Gender expectations, like the ability of mothers to handle all childcare responsibilities individually, can make some women reluctant to talk about emotional health [30]. For instance, one participant in a study with Hispanic immigrant women stated, "In the Hispanic culture, the mothers always do everything, like taking care of the children, cleaning the house. They are expected to do everything. And people really think less of them when they have an expression of anger. Some women [may] think they cannot take it anymore, and that she is going to explode her emotions" [31]. As stigma and insufficient information about postpartum depression can negatively impact help-seeking behavior, provisioning education about symptoms and seeking help is critical for treatment [32]. Lack of language proficiency, transportation and similar barriers to access mirror cases with discrepancies in prenatal care. Future studies should consider PPD screening rates among immigrant women as a preventative measure seeing the relative invisibility of the illness and the gap in diagnosis and recognition of the issue. Additionally, investigations into immigrant women's experience of postpartum services can provide insight into the adequacy of such services and whether immigrant women feel safe disclosing information to healthcare providers.

DISCUSSION

Strengths and Limitations

This systematic review of 17 studies from 5 countries represents the experiences and perceptions of various immigrant women and paints a collective overview of the complex needs of childbearing women at a critical time when they are most dependent on health support systems. However, some methodological limitations must be acknowledged when considering the research findings. Experiences of foreign-born women are not uniform and may vary by migrant subgroups as categorized by place of origin and race/ethnicity. Specifically, not all cultural practices surrounding birth could be accounted for and examined in depth for how they are received. Since some of the studies drawn are small and qualitative, the representativeness of immigrant participants cannot be ascertained. Additionally, as it was impossible to summarize the findings from all higher-income countries, this study was largely focused on five countries, though migration is widely distributed among many more. However, the systematic review provided an overarching cumulation of multiple different perspectives from patients and healthcare providers, allowing a comprehensive understanding of the challenges that immigrant women face throughout the total trajectory of maternal health. Synthesizing evidence from qualitative studies with testimonies from immigrant participants directly allowed for personal insights, useful for assessing contributors to postpartum depression that can be beneficial in accessing contributors and personal challenges like cultural discrepancies.

Recommendations for Future Research

Regarding directions for future research, it should be noted that in many studies, the length of time in the receiving country and immigration status were often not considered potential confounding variables. Further research is needed to determine how specific institutional policies and healthcare systems may influence women's ability to obtain maternity care. For prenatal health, further investigations could be helpful in identifying existing migrant-specific prenatal care programs and their effects on prenatal care utilization. In addition, future studies should consider PPD screening rates among immigrant women as a preventative measure seeing the relative invisibility of the illness and the gap in diagnosis and recognition of the issue.

Investigations into immigrant women's experience of postpartum services can provide insight into the adequacy of such services and whether immigrant women feel safe disclosing information to healthcare providers. More studies on subsequent generations of immigrants can also provide insight into the degree to which traditional practices are maintained and the effect of acculturation on maternal health outcomes, as the length of stay can affect the level of familiarity with the healthcare system while at the same time may hold onto traditional family practices.

Recommendations for Health Professionals

Throughout the trajectory of maternal care, it is evident that multiple obstacles stand in the way of immigrant women. However, there are multiple suggested measures that healthcare providers and services can take to resolve the disparities. For prenatal care, increased availability of trained interpreters or offering pregnancy preparation courses in other languages is crucial to overcoming language barriers. Different models of antenatal care catered toward immigrant women have been proposed in past studies: Group antenatal care offered in-language information, and group advising was received as supportive and positively evaluated [33]. Additionally, there should be measures to increase awareness of the availability of such services. Due to the often limited knowledge immigrants have about the structure of the healthcare system in the new country, additional guidance on how the healthcare system is built, informing pregnant patients of their rights and education on all the available options and support systems are suggested. Moreover, the studies highlighted the importance of culturally sensitive care. While it is not possible to learn every ethnic group's beliefs, providers should be trained in cultural humility, defined as an ongoing process of self-reflection wherein individuals reflect on their background and situation, which can encourage an atmosphere that is receptive of and acknowledges differing patient interests and beliefs that conflict with the healthcare provider's form of care [34]. There should be a focus on promoting equity and non-discriminatory attitudes among HCPs. As a possible solution, HCPs can consider the use of multicultural doulas. A doula is a woman experienced in childbirth and can provide continuous support throughout the duration before, during and after birth. Doulas who share a language and culture with the women can help facilitate discussions for midwives while also providing emotional support and bridging divides in understanding women's cultural customs and practices [35]. As another recommendation, it's important to ask women their preferences to provide any specific needs they may have to make them feel attuned to their specific circumstances: i/e, a) whether women who have undergone female genital mutilation want to undergo deinfibulation, a practice performed before pregnancy to minimize the risk of extensive perineal tearing, b) whether they want a cesarean section, and c) whether they would like to be seen by only female midwives, among many other adjustive practices like providing hot drinks and alternative comfort measures instead of ice packs
[36]. Finally, disparities in rates of postpartum depression reveal the need to raise awareness of depression early on in the healthcare setting with accessible community-based support. For instance, a study showed Latina women attending group-based cognitive behavioral therapy resulted in lower perinatal depressive symptoms during pregnancy and postpartum [37].

CONCLUSION

Using a systematic methodology examining 17 articles, this literature review attempts to identify barriers and challenges immigrant women face while attempting to access and utilize maternal healthcare services during significant periods of pregnancy, from prenatal care and in-hospital delivery to postpartum depression. Overall, the studies highlight the need for maternal care service providers to be open to considering differing cultural expectations of care and adopt flexible models that support immigrant women's needs. Measures should be taken to address systemic barriers to care relating to access and language services, quality of care experience that is receptive to cultural needs, and wider screening and awareness for unaddressed and unknown health concerns.

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The Columbia University
JOURNAL of
GLOBAL HEALTH

OPIOIDS AND COVID-19: PERFECT STORM, OR PERFECT OPPORTUNITY?

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ABSTRACT The opioid epidemic in the United States has been made worse by the COVID-19 pandemic, due to increased stress and isolation, reduced access to addiction treatment services, and a disruption in the supply chain for conventional opioids, resulting in more dangerous and potent drugs entering the market. This has led to a spike in overdose deaths, particularly from fentanyl and other synthetic opioids. The availability of Naloxone, the opioid overdose reversal medication, has also been affected by the pandemic, with shortages in some areas due to supply chain disruptions. Access to buprenorphine and methadone, drugs used in opioid use disorder (OUD) therapy, has also been limited due to social distancing guidelines, however government policy has gradually adapted to loosen regulations surrounding their access.

KEY WORDS COVID-19, vaccination, hesitancy, acceptance, predictors, vaccination policy

INTRODUCTION

In the United States, the opioid crisis has long been a serious matter of public health. However, the already difficult issue of opiate addiction and overdose has been worse by the COVID-19 epidemic. Increased stress and isolation brought on by the pandemic during the lengthy confinement might lead to the onset of opioid addiction and restrict access to facilities for addiction treatment.

An upsurge in overdose deaths has been one of the COVID-19 pandemic's most important effects on the opioid epidemic. This is probably caused by a number of things, such as lack of access to addiction treatment facilities, financial worries, anxiety about one's health and the state of society, and physical isolation brought on by the epidemic. Additionally, the epidemic has caused a breakdown in the supply chain for traditional opioids, which has allowed for the entry of more harmful and strong substances on the market. As a result, overdose deaths have increased, particularly those caused by fentanyl and other synthetic opioids, making it a top cause of death in the country[1].

The pandemic has also had an impact on the availability of Narcan, the opioid overdose reversal medication.

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While the distribution of Narcan has been increased across the United States, there have been shortages in some areas due to supply chain disruptions. This has made it more difficult for first responders and others to access the medication, which can be critical in reversing an overdose[2].

Public health authorities are striving to make the opioid overdose reversal drug naloxone, better known as Narcan, more widely available in order to combat this issue. Naloxone has been demonstrated to be a useful tool in lowering overdose mortality and can swiftly reverse the symptoms of an opioid overdose. The availability of Narcan has risen across the country, and in the majority of the states, it is now widely available at pharmacies without a prescription. A lot of municipalities have also put in place programs that teach people how to use naloxone and give it to people who are at risk of overdosing.

To stop the opioid crisis, however, more Narcan has to be distributed. Access to services for addiction treatment is also essential, but the epidemic has reduced access to these treatments. Due to the epidemic, many addiction treatment facilities have been forced to cut their capacity or close their doors, leaving people who need in-person monitoring and treatment alternatives short. Additionally, because of increasing financial difficulty and transportation issues, the epidemic has made it more challenging for individuals in need of treatment to reach it.

To explore this exacerbation of the opioid epidemic post-COVID, it is imperative to disambiguate the biological, psychological, and sociological factors that existed throughout the history of the opioid crisis, particularly during the pandemic.

LITERATURE REVIEW

History of Opioid Epidemic

Despite recent attitudes in the clinical setting that led to the overprescription of opioids, during the early 20th century, opioids were feared for their addictive potential. Cautious clinicians discouraged opioid use outside of treatment of cancer pain, and even then, cancer patients were only encouraged to use opioids toward the end of their lives[3]. This state of “opiophobia” lasted until attitudes began shifting in the late 20th century, when the medical field began believing that the responsible prescription of opioids would rarely lead to addiction. Certain physicians were increasing their criticism of the opiophobia status quo, as those suffering from severe pain were not being prescribed high enough levels of opioid analgesics due to false fears of addiction[4]. Two publications from this time, a letter to the editor published in the New England Journal of Medicine and a retrospective review of thirty-eight chronic pain patients, each of which lacked the scientific rigor and method of proper studies, lent support to the idea that addiction rates from opioid use was very low[5-6]. In addition, overeager cancer pain specialists, whose field was developing quickly in the late 1980s and 1990s, felt the need to expand opioid use to non-cancer pain applications. Thus, opioids became widely used to treat chronic pain[7].

Alongside the general promotion of opioids as a clinical tool, the American Pain Society’s persuasive campaign to classify pain as a fifth vital sign in the 1990s put more emphasis on pain treatment in clinics. As a result, reporting and treating pain symptoms became highly standardized with a system imposed by The Joint Commission, an accreditation organization for U.S. health care organizations. The result of this period’s opioid-friendly culture was a massive acceleration in the prescription and use of opioids. OxyContin prescriptions increased by over nine times, from 670,000 to 6.2 million, between 1997 and 2002. General opioid consumption rose from 46,946 kg in 2000 to 165,525 in 2012, the peak level of consumption[8]. Per patient consumption rose from 40.4 morphine milligram equivalents (MMEs) to 46.6 MMEs from 2000 to 2002[9].

While at first there were no alarms surrounding increasing addiction rates, researchers began noticing that rates of oversedation began going up around the same time as the increase in the prescription of opioids, rising from 11.0 per 100,000 inpatient hospital days to 24.5 per 100,000. Fatal respiratory depression rates as a result of oversedation rose as well. As the potential dangers of opioids in the clinical setting became more widely known, the government began taking legal action against opioid manufacturers for certain offenses. In the case of Purdue Pharma, such lawsuits were laid on the basis of the company’s decisions to downplay the risks and overstate the benefits of their product, OxyContin[10]. Opioid prescription rates began decreasing in the late 2000s and early 2010s due to wider awareness of the drug’s risks. Between 2006 and 2018, the opioid dispensing rate for patients under 25 decreased from 14.28 MMEs to 6.45 MMEs. In addition, high-dosage and long-duration prescriptions, which are higher-risk methods of opioid consumption, decreased specifically for people between the ages of 15 and 24[11]. Changes in prescription practices may reflect a rising skepticism of opioids’ true efficacy and safety.

The consequences of opioid over prescription extended beyond the clinic, however. An analysis of opioid overdose deaths in combination with other substances found that, between 2002 and 2015, prescription overdose deaths rose by 2.6 times, with the most common drug taken in combination with the prescription drug being benzodiazepines. The study went further and analyzed deaths from synthetic opioids other than methadone, finding that deaths from those specific opiates rose by 5.6 times. This number reveals a key consequence of overprescription in hospitals: the spread of non-prescription opioids. In 2016, for instance, 64,000 people died from overdoses. Of those, 42,000 were from opioids. The breakdown of opioid overdose deaths is as follows: fentanyl was responsible for the highest portion of opioid deaths at approximately 20,000, heroin was next highest at 15,000, and prescription opioids were responsible for less than 15,000[12]. This is why, even as the consumption of prescription opioids peaked in 2012, deaths from all types of opioids continue to rise. People that may have started out with an OxyContin prescription have transitioned to new drugs that are cheaper and more potent.

Symptoms of Opioid Addiction

Opioid addiction, or opioid use disorder (OUD), is a chronic disorder characterized by the compulsive use of opioids despite the harm it causes to an individual's physical, psychological, and social well-being.

The symptoms of opioid addiction can be divided into physical, behavioral, and psychological categories, though most people experience a variable combination of all categories. Physical symptoms include tolerance or needing higher doses to achieve the same effect; withdrawal symptoms, such as nausea, muscle aches, and insomnia, when not using the drug; and continued use despite negative consequences. Behavioral symptoms include neglecting responsibilities, difficulty reducing or stopping use, and difficulty maintaining relationships. People with opioid addiction may also engage in risky behaviors such as sharing needles or stealing money to obtain the drug. Psychological symptoms include mood swings, anxiety, and depression[13], because opioids can affect the brain's ability to regulate emotions and stress. Opioids work by “dampening the brain's response to stress and negative emotions, which can make it difficult for an individual to cope with stress and negative emotions in circumstances without the drug”[14]. People with opioid addiction may also experience unusual cravings that can be difficult to satisfy and a loss of interest in activities they used to enjoy.

Opioid addiction occurs when a person repeatedly uses the drug and it begins to affect the brain's reward system. Opioids bind to specific receptors in the brain, which leads to an increase in the release of dopamine, a neurotransmitter associated with pleasure and reward. Over time, “the brain adapts to the presence of opioids and produces less dopamine on its own, leading to a decrease in the individual's ability to feel pleasure without the drug”[15]. This creates a cycle of dependence on the drug to feel normal, and thus the aforementioned symptoms are experienced as a result of the dependence. Additionally, withdrawal symptoms can be very uncomfortable and can be one of the reasons why people continue to use opioids despite negative consequences.

The type of opioid used, the length and frequency of use, and the person's general health all play a role in how severe and long withdrawal symptoms last. The brain may change as a result of prolonged opioid usage, making the body dependent on the drug in order to operate normally. The brain and body must readjust when someone stops using opioids, which may result in withdrawal symptoms. The symptoms of intense opioid withdrawal, which are brought on by regular use of narcotics like heroin, fentanyl, and oxycodone, can start between 12 and 30 hours after the last use[14]. Highly potent opioids are most commonly seen in overdoses because of their greatly addictive characteristics making withdrawal symptoms unbearable for most users.

A mix of medical, psychological, and social therapies are frequently utilized to assist people in overcoming their addiction and regaining control of their life. Fortunately, opioid addiction is a curable disorder. As well as behavioral therapies like "cognitive-behavioral therapy and contingency management can be effective in addressing the underlying psychological and social factors that contribute to addiction," medications like methadone, buprenorphine, and naltrexone "can help to alleviate withdrawal symptoms and cravings" It is crucial to remember that opioid addiction is a complicated, multifaceted issue that calls for an all-encompassing and tailored strategy[13]. It is not only an individual's responsibility but also a responsibility of the society to work together to address the opioid crisis. This includes reducing the over prescription of opioid painkillers, increasing access to addiction treatment, and addressing the underlying social and economic factors that contribute to addiction.

Sociological Factors Leading to Addiction and COVID-19 Risks

Independent, relational, cooperative, and societal levels are the four points where the main risk factors for opioid abuse are present. To develop efficient and comprehensive interventions to address the opioid crisis, each of these levels must be taken into account.

Beginning with the initial causes of the opioid epidemic, the number of opioid prescriptions filled each year in the US between 2006 and 2017 was approximately 224 million, or nearly one for every citizen[16]. Opioid overprescription is influenced by a number of factors. For instance, some doctors might not have adequate training or knowledge regarding the risk of opioid misuse, which can result in unsafe prescribing. Additionally, some medical professionals might exaggerate the advantages of opioids while underestimating their risk, which could result in over-prescription of painkillers. However, due to governmental intervention guidelines, there have been some decreases in the use of opioids[17].

Pharmaceutical marketing campaigns that misrepresented opioids as non-addictive and offered doctors financial incentives also contributed to overprescription. This increased the number of prescriptions and branded physicians who refused to write opioid prescriptions as having "opiophobia." Opioid misuse is also influenced by how opioids are made. Standard opioid pills can be crushed to produce a faster effect when administered intravenously or intranasally[18].

Another significant source of opioids used inappropriately is the black market[19]. In most areas of the United States, heroin is affordable and widely available, and there is a sizable online opioid market that allows users to buy unregulated opioids from the internet. Since 2015, the number of overdose deaths has dramatically increased, in part because highly potent synthetic opioids like fentanyl and fentanyl analogues have become more widely available[20]. The misuse and overdose rates of opioids have varied significantly by geographic location. The higher rates of opioid prescriptions and overdose deaths in non-metropolitan areas may be caused by a lack of access to healthcare services. Additionally, research has shown that racial and ethnic minorities are less likely to receive treatment, are admitted to treatment later, and have less access to treatment overall[21].

The broader societal context influences the key risk factors for opioid abuse, including opioid supply and demand, governmental regulations, prevailing economic and employment trends, media coverage, social stigma, prejudice, and advertising and education campaigns. Variations in a drug's supply and demand have an impact on the market economy of opioids. Due to overprescription, theft, and redistribution of the pills to family, friends, and coworkers, the supply and availability of opioids increased. This was made worse by the extensive legal advertising strategies used by pharmaceutical companies, which can alter consumers' perceptions of the dangers of opioids and raise their awareness of the availability of prescription drugs[22]. As unregulated opioids flooded the market and heroin became less expensive, the epidemic grew worse over time. One of the most frequently cited factors for switching from prescription opioids to heroin is cost. Opioid supply can be controlled by decreasing prescribing or increasing the use of formulations that discourage misuse, but these efforts may be thwarted by unintended, immediate negative effects.

Opioid-related government policies and regulations can take many different forms, including Medicare/Medicaid rules, drug scheduling by the Drug Enforcement Agency, restrictions on how they are prescribed, including the use of prescription drug monitoring programs. Data show the potential benefits of policies like Prescription Drug Monitoring Program requirements, naloxone access laws, and Good Samaritan laws. The federal and state governments regulate accreditation and licensing requirements, as well as specifics of training and service delivery, which has implications for treatment accessibility[23].

Health insurance coverage rates differ by state, which has an impact on who can receive OUD treatment. The availability of effective OUD medications has been significantly impacted by Medicaid expansion, with states that did so seeing a more than four-fold increase in prescriptions. Payer policies affect access to treatment for pain, mental illness, and OUD in addition to their impact on the supply of opioids[23].

A significant barrier to receiving treatment for opioid misuse is social stigma, which stems from the misconception that substance abuse is a result of moral decay and poor willpower. Similar to how cultural and social beliefs can be harmful or beneficial, they can also be communicated through media and social media. Economic uncertainty, deteriorating social cohesion, and a decline in trust in institutions have all been linked to an increase in "deaths of despair", typically referring to overdose and suicide fatalities, between 1999 and 2017[23].

Opioid misuse and opioid use disorder (OUD) are greatly influenced by individual factors. These factors can have an impact on how likely it is that an individual will be exposed to opioids, begin abusing them, develop and maintain OUD, enter treatment, continue participating in treatment, and relapse after making an effort to stop. They include sociodemographic, physical and mental health, biological, and psychosocial elements. These elements frequently interact and can both contribute to and result from opioid misuse. Early onset of opioid abuse, gender, race, access to healthcare, pain, mental health, past substance abuse, and genetic susceptibility are all risk factors[23].

The beliefs, attitudes, and behaviors of individuals are significantly shaped by their family, friends, and coworkers, which affects the likelihood of opioid use and abuse. Both genetic and environmental factors can increase risk when there is a family history of substance use disorders. Since 70% of people who misuse opioids report getting them from family, friends, or coworkers, access to opioids from these sources is also a risk factor[24]. The likelihood of receiving treatment is also influenced by interpersonal relationships, with parental disapproval of drug use discouraging use and family support for recovery increasing likelihood. Social network emotional support can improve treatment motivation and medication adherence[25].

The community's potential impact on opioid-related risks is examined at the cooperative level. Opioid misuse can be caused by a variety of factors, including geographic conditions, accessibility to care, medication disposal services, workplace environments, prescribers' perceptions of risk, over- or under-prescription of opioids for pain, types of prescription opioid formulations that are available, community norms, and availability of both legal and illicit opioids. In addition, from over 25,000 cases associated with correctional facilities to date, the COVID-19 pandemic has brought attention to the disproportionate population of individuals with opioid use disorders (OUDs) in the US prison system. Due to pre-existing conditions, these people are more likely to contract the virus, and the outbreak in correctional facilities brings into focus the socioeconomic and health inequalities that come along with mass incarceration. People with OUD are at considerable risk from the COVID-19 pandemic, especially those who are incarcerated or have just been released. Within the first two weeks after release, the risk of dying from an opioid overdose is 40 times greater, and the availability of fentanyl and the disruption of the supply of illegal drugs caused by border restrictions, due to the pandemic, may make this risk even greater. Additionally, inadequate staffing and a shortage of personal protective equipment (PPE) have disrupted harm minimisation programs that offer sterilized drug use equipment, medication-assisted treatment, overdose education, and opioid antagonists distribution, raising the risk of HIV, HCV, and COVID-19 transmission within drug-using networks. It is crucial to take these dangers into account and offer re-entry services like overdose prevention[26].

Furthermore, African Americans and Latinos are disproportionately affected by the COVID-19 pandemic, especially drug users who live in underserved areas of these communities. Due to persistent health disparities and a lack of personal and communal resources, these populations face greater difficulties in accessing and staying in drug treatment, putting them at further risk of relapse or exposure to addiction. To ensure that everyone has equal access to care and support, new treatment regulations must take these factors into account, such as lack of access to technology, in regard to telemedicine appointments, and transportation, and address economic inequalities. If these discrepancies are not addressed, the inequality present in the opioid epidemic will only further widen[22].

Early Challenges with Fighting the Opioid Epidemic During the Pandemic

Progress made against the opioid epidemic was halted considerably by the COVID-19 pandemic. Treatment for opioid addiction relies on face-to-face medical care, and social distancing guidelines proved to be a major hindrance to those seeking such treatment. Initial problems for those suffering from addiction included difficulties in obtaining methadone and buprenorphine. These are long-acting opioids that reduce cravings for other, short-acting opioid drugs, such as those fueling the opioid epidemic. Methadone administration is highly regulated and cannot be taken without direct supervision due to perceived risk of abuse. As a result, it was initially difficult to administer methadone to people suffering from OUD without breaking social distancing guidelines. Buprenorphine was not subject to similarly tight restrictions and was more easily available, as month-long supplies are commonly available at pharmacies[27].

However, the issues surrounding drugs used in the fight against the opioid epidemic are only one side of the story. Physicians working on the front lines against the opioid epidemic found themselves sidelined, a lesser priority during the early, uncertain days of the pandemic. The shift to telemedicine also became a challenge for a field that relied on in-person drug administration and care. Although telemedicine, in combination with looser buprenorphine prescription guidelines, proved to be a boon for those undergoing buprenorphine-naloxone treatment virtually, not everyone suffering from OUD had access to telemedicine services. In particular, the economically disadvantaged and incarcerated people that were allowed to leave jails and prisons to reduce the spread of COVID-19 had little guidance with regard to how to receive care[28]. Additional frictions associated with the switch to telemedicine include sacrificing urine drug sampling, face-to-face patient screening, and similar contact-heavy measures in order to shift to telemedicine[29].These, and other issues, were addressed somewhat but still contributed to a rise in the severity of the opioid epidemic.

Policy Responses to the Opioid Epidemic in the COVID-19 Era

Methadone and buprenorphine-naloxone treatments, which are crucial to treating OUD, became more difficult to access during the early stages of the COVID-19 pandemic due to social distancing guidelines. Timely policy changes meant to make it easier to access these drugs were put in place to balance social distancing guidelines and the need to continue providing care to people suffering from OUD. Medical treatments for OUD (MOUD) already suffer from low availability and stigma[22]. This is despite their significant efficacy. After an overdose, patients that undergo methadone treatment have a 59% reduction in death rates, and those that undergo buprenorphine treatment have a 38% reduction in death rates. Regulations, however, further reduce the incentive for patients to begin treatment with MOUD. Buprenorphine, for example, requires in-person visits and counseling, and daily doses of methadone cannot be taken in the absence of direct supervision, with rare exceptions. Ironically, due to methadone being a Schedule II drug and buprenorphine being a Schedule III drug, along with a slew of national and state-level regulations, these treatments are more tightly controlled than opioids prescribed for pain. As a result, under a third of people suffering from OUD are prescribed MOUD. In addition, these obstacles make it most difficult for those just beginning MOUD therapies to continue treatment. Under half of patients who are admitted for detoxification return for more care, and even fewer then receive prescriptions for MOUD.

To ensure that these poor outcomes were not exacerbated due to the pandemic, the Substance Abuse and Mental Health Services Administration (SAMHSA), the Drug Enforcement Administration (DEA), and the Centers for Disease Control (CDC) made the decision to loosen these restrictions due to COVID-19 and make it easier to conduct care with telemedicine. The CDC recommended that health systems and payers begin increasing the practice and billing of telehealth services for both the prescription and intake of medicine and counseling. Buprenorphine, for example, can now be prescribed via telemedicine, and it is now easier for patients to receive extended 14 or 28 day supplies of methadone, depending on the stability of the patient. and methadone can be taken home more easily[14].These changes open a path to discussing a permanently looser regulation regime surrounding MOUD[22].

Regulations governing Medication-Assisted Treatment for Opioid Use Disorder (MOUD) have been loosened as a result of the COVID-19 pandemic in an attempt to enroll more people in treatment and stop the virus from spreading among this vulnerable population. Regulations are being loosened to permit methadone take-home doses, buprenorphine initiation and maintenance via telemedicine, and interstate telemedicine. By doing this, healthcare professionals and people with OUD will have more access to and practical use of MOUD. However, there are qualms regarding the possibility of prescription opioids being diverted to the black market and the potential risks associated with medication abuse. Study results have shown that MOUD can be reliable and safe when governed by more flexible regulations, as demonstrated by the introduction of buprenorphine in France in the 1990s, which resulted in a significant rise in the number of people receiving treatment and a decrease in the number of people dying from opioid overdoses[22].

Rural areas face a major problem with the availability of medication-assisted treatment for opioid use disorder (OUD). Few buprenorphine prescribers and a lack of methadone maintenance services are prevalent in many areas. Additionally, MOUD cannot be started in residential treatment programs or prisons prior to release, which raises the danger of overdose fatalities. By establishing a remote connection between patients and doctors, telemedicine has the potential to make MOUD accessible in these underserved regions[22].

Emergence of Telemedicine

While there are a lot of potential advantages for telemedicine in treating opioid addiction and drug overdose, there are also some drawbacks and restrictions. After the COVID pandemic, this was looked at, and for more than a year, telemedicine was the only method to access healthcare.

One worry is that telemedicine might not offer the same standard of care as in-person treatment, particularly for specific populations, such as those who are at a high risk of overdosing or those who have serious mental health conditions. A multifaceted strategy is frequently necessary for addiction therapy, one that includes monitoring the patient's physical and mental health in a safe environment in addition to medicine, counseling, and other therapeutic treatments. Telemedicine frequently can't provide the same level of continuity and coordination of care as in-person treatment, which could lead to poorer outcomes for patients.

Another issue is that complex social and psychological aspects that lead to opioid addiction and drug overdose may not be adequately addressed via telemedicine. It is common for addiction to be connected to other problems like poverty, trauma, and mental health conditions. Due to its limited capacity to conduct physical exams and diagnostic testing, as well as privacy and security issues with communicating sensitive medical information online, telemedicine may not be able to effectively address these underlying conditions, which could increase the chance of relapse. Furthermore, telemedicine might not be able to offer the same level of supervision and monitoring as in-person care, which could increase the risk of pharmaceutical abuse or diversion. Finally, not everyone may have access to telemedicine. Some people may not have access to the technology or internet required for telemedicine, and others may not feel comfortable using technology for healthcare.

Utilizing telemedicine for medication-assisted treatment (MAT) is one method it is being used to combat the opioid problem, particularly during the COVID epidemic. MAT is a kind of treatment that combines counseling and other therapeutic services with the use of drugs like methadone or buprenorphine. Patients can receive MAT remotely thanks to telemedicine, which can be especially helpful for people who reside in locations with a shortage of healthcare professionals who can give this type of treatment[22]. However, a study published in the Journal of the American Medical Association in 2019 found that telemedicine-delivered MAT was associated with lower rates of treatment retention and much lower rates of opioid abstinence compared to in-person MAT[30]. This shows that the pandemic has likely disrupted access to substance abuse treatment and support services because of the prolonged shut down of in person services, making it more difficult for people struggling with opioid addiction to get the help they need due to the statistically significant reduced effectiveness of telemedicine. This also stresses the importance for proper overdose education especially post epidemic as overdose rates have been at all time national high. In a study of telemedicine for overdose education and naloxone distribution (OEND) found that patients who received OEND via telemedicine post-COVID were more likely to report having administered naloxone to someone experiencing an opioid overdose, and were more likely to report having called for emergency medical services [30].

CONCLUSION

Deaths from opioid abuse have risen substantially since the beginning of the COVID-19 pandemic. Inadequately addressed social issues contributed to this rise, but certain policy decisions meant to streamline addiction treatment have shown that state and federal governments are understanding the deep dangers of the opioid epidemic. COVID-19, in some ways, has proven to be a valuable moment of policy experimentation. Deregulating access to buprenorphine and methadone will generate useful data, allowing researchers to accurately weigh the pros and cons of continuing such a policy indefinitely. The pandemic has also shown that telemedicine is useful but has its limits, especially in the realm of addiction treatment. Not every patient has easy access to high-speed internet and video-capable devices, and this is especially true of the demographic groups most at risk of opioid addiction. Exposing these holes in the patient base and the initial shock of the pandemic itself will create forward momentum among policymaker circles to continue experimentation and hopefully create a robust framework to meaningfully reduce the rate of opioid addiction.

Fighting the crisis of opioid addiction is the most important public health priority of our times. It is quieter than other crises, like obesity and COVID-19, yet similarly deadly and arguably more destabilizing to vulnerable communities. America’s life expectancy declined from 2014 to 2018, largely the result of the opioid epidemic[29]. This decline has continued to 2021, due to the COVID-19 pandemic and a continued rise in opioid deaths. Developing an addiction support system that minimizes barriers to therapy, the wide distribution of naloxone, and more public awareness of the epidemic will push America's life expectancy numbers higher, reduce strain on our healthcare system, and resolve the mistakes the pharmaceutical and healthcare sectors made forty years ago.

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