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Combining Task Shifting and Community-based Care to Improve Maternal Health: Practical Approaches and Patient Perceptions

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Abstract

Globally, community-based care and task shifting strategies are used to address maternal healthcare shortages in low-income countries. Limited research exists on models that combine these strategies. Using a qualitative approach, we explored Haitian women's perceptions of the Midwives for Haiti model, which unites task shifting and community-based care by training nurses as skilled birth attendants and offering healthcare via rotating, mobile clinics. Eight focus groups (N = 52) were conducted in rural Haiti in March 2017. Thematic analysis of data indicated that perceptions of care were universally positive. Participants cited accessible patient-centred care, affordable services, and health education as primary motivators to attend. Results illustrated the importance of women's perceptions on the future use of mobile clinic sites or other formal care. Future efforts to address maternal healthcare shortages should consider the Midwives for Haiti model, combining task shifting and community-based care to address common social, topographical, or financial barriers to maternal healthcare.

Keywords

Haiti; Task Shifting; Maternal Health; Community-Based Care; Skilled Birth Attendants

Introduction

Despite being one of the highest aid-receiving countries in the world, Haiti continues to experience high rates of maternal deaths. As the poorest country in the Western Hemisphere, Haiti experiences a shortage and an inequitable distribution of health resources, contributing

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to health outcomes for Haitian women that are among the worst in the world (World Health Organization, 2014). Haiti's 2013 maternal mortality ratio (MMR) was 380 deaths per 100,000 live births and the lifetime risk of dying from complications from childbirth was 1 in 83. Further, Haiti's MMR was much higher than the 2013 global MMR—210 maternal deaths—and was one of only two countries with high MMR outside of sub-Saharan Africa (World Health Organization, 2014).

High MMR in low-income countries has been explained by various systemic factors, including: limited accessibility to care, inadequate facilities, lack of trained practitioners at multiple skill levels (doctors, nurses, or skilled birth attendants), low percentage of prenatal and postnatal visits, high-risk deliveries in ill-equipped facilities, and delays in emergency care seeking (Barnes-Josiah, Myntti, & Augustin, 1998; Kassebaum et al., 2014; Pacagnella, Cecatti, Osis, & Souza, 2012). Numerous strategies are used globally to combat these issues. For example, task shifting—a capacity-building technique which equips individuals to fulfil healthcare roles typically served by those with advanced education—is recommended by the World Health Organization [WHO] as a cost-effective strategy for addressing healthcare worker shortages (Seidman & Atun, 2017; WHO, 2008). Community-based care is also cited as an effective approach (Darmstadt et al., 2009; Vaughan, Kok, Witter, & Dieleman, 2015).

With an increase in programs and interventions aimed at improving maternal outcomes, more attention is needed to the quality of care provided and received (Austin et al., 2014). According to the Institute of Medicine (2001), quality care involves care that is safe, effective, patient-centred (defined as "care that is respectful of and responsive to individual patient preferences, needs, and values," p.3), timely, efficient, and equitable. Numerous studies, especially those highlighting the work of community health workers, describe the health promotion benefits associated with combining task shifting and community-based care to address maternal health issues in low- and middle-income countries (Gilmore & McAuliffe, 2013). However, no information, to our knowledge, exists on patient perceptions to such an approach. Thus, the current study describes the simultaneous use of task shifting and community-based care to address maternal healthcare needs, with a focus on patient perceptions of this work. This information is timely and relevant for advancing knowledge about the utility of such a combined approach, since patient perceptions of care can influence motivations to seek care, sustainability of care, and improvements in healthcare practice (Black, 2013).

Maternal Healthcare in Haiti

Political, financial, and environmental instability have led to Haiti's fragile and underdeveloped health system, comprised of an ad hoc 'system' of public, private, and nonprofit providers (Durham, Michael, Hill, & Paviignani, 2015). Coordination of care between organizations or individual providers tends to be lacking or non-existent. Some regions have varying degrees of healthcare access, due to a lack of infrastructure and accessibility in rural areas (Amibor, 2013; Kligerman, Walmer, & Bereknyei Merrell, 2017). Notably, the 2010 earthquake disrupted the healthcare landscape and complicated systemic

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coordination across Haiti's public, private, and non-profit sectors of care (Amibor, 2013; Durham et al., 2015; Kligerman et al., 2017).

Although there are various cadres of maternal care in Haiti (see Floyd & Brunk, 2016 for a detailed description), the systems of care are under-resourced, fragmented, and inaccessible to many women around the country, resulting in significant barriers in accessing maternal care. Such obstacles include lack of infrastructure, prohibitive costs, cultural preferences, and social stigma (Cianelli et al., 2014; Peragallo Urrutia et al., 2012; Perkins et al., 2017; Williams et al., 2015). Haitian women also cite inadequate quality of care, long waits, and inconvenient hours as barriers to participate in formal maternal healthcare (Perkins et al., 2017; Cianelli et al., 2014).

Globally, strategies to overcome barriers to maternal care include providing family planning or contraception, subsidizing healthcare visits, developing birth centres, improving emergency transportation, and improving the healthcare work force (Elmusharaf, Byrne, & O'Donovan, 2015). To assist women with overcoming barriers to care in Haiti, providers have employed task shifting and community-based care (Floyd & Brunk, 2016).

Task shifting

Task shifting is a capacity-building strategy that redistributes and reorganizes the service provision of healthcare (WHO, 2008). It does so by 1) developing and equipping a new category of healthcare professionals to fill roles typically served by providers with advanced education and qualifications; and/or 2) transferring tasks from specialized healthcare providers to other existing professionals with fewer years of training (Deller et al., 2015; WHO, 2008). For example, in task shifting, community health workers can receive training that targets specific diseases, risks, or health outcomes to equip them to perform duties traditionally performed by nurses (Seidman & Atun, 2017; WHO, 2008). In maternal health specifically, task shifting can train community health workers to handle postpartum haemorrhages, while non-physician clinicians can be equipped with skills for emergency obstetric care (Ejembi, Norick, Starrs, & Thapa, 2013; Gessessew, Barnabas, Prata, & Weidert, 2011). Research has found that task shifting can expand maternal healthcare to those with little or no access in low income countries, achieving cost effectiveness and quality outcomes while reducing healthcare inequalities (Dawson, Buchan, Duffield, Homer, & Wijewardena, 2014; Deller et al., 2015).

Community-based care

Like task shifting, community-based care seeks to address critical shortages in the health workforce worldwide (Darmstadt et al., 2009; Vaughan et al., 2015). Communitybased care (also known as community-oriented care) refers to healthcare delivered in community locations such as community centres, churches, schools, and/or homes. The term is also used to describe health services provided by community-based healthcare workers (i.e., individuals *local* to the context who have no formal professional degree; Vaughan et al., 2015). Community-based care workers may provide a range of services, such as preventative care, case management of illness, and referrals of patients to clinics and hospitals if needed (Schiffman, Darmstadt, Agarwal, & Baqui, 2010). Given that communitybased care is

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designed to increase local capacity for healthcare delivery, it enables healthcare to complement the social and cultural context specific to the community (Schiffman et al., 2010). Growing evidence suggests that community-based maternal healthcare has potential to improve maternal, neonatal, and perinatal outcomes (Azad et al., 2010; Tripathy et al., 2010). For example, a systematic review by Darmstadt et al. (2009) found that about a third of neonatal deaths can be reduced by community and outreach care.

Combining approaches

In low-income countries, most maternal and new-born deaths occur outside healthcare facilities and without skilled maternal care (Darmstadt et al., 2009; Schiffman et al., 2010). To address this issue, considerable international attention has been paid to the use of a 'facilities-based health approach,' which seeks to increase women's use of care in hospitals or clinics. However, critiques of this approach suggest that in under-resourced settings, facilities-based health systems may be prohibitive for women because formal care centres (e.g., hospitals) are either non-existent, inaccessible, and/or poorly functioning (Teela et al., 2009). Relatedly, while task shifting in existing facilities is useful, more population level health benefits may be realized by combining this approach with the delivery of community-based care.

Indeed, previous research demonstrates that multi-pronged, 'packaged,' approaches (e.g., those that ensure accessible maternal healthcare and well-trained providers) may be effective in reducing maternal morbidity and neonatal mortality in resource-limited countries (Lassi & Bhutta, 2015). However, less is known *specifically* about combining task shifting and community-based care, outside of community health worker models. An example of this combined approach can be seen in the work done by Midwives for Haiti (MFH), a non-profit committed to increasing access to maternal care for women in rural Haiti.

Midwives for Haiti Model: Combining community-based care and task shifting

Funded by foreign donors and foundation grants, MFH utilizes volunteer efforts (donations of time and supplies) to work within Haiti's developing infrastructure to increase Haitian women's access to maternal health services and skilled birth attendants (SBAs; Floyd & Brunk, 2016; MFH, 2016b). According to the World Health Organization (2004), a skilled birth attendant is an accredited health professional—such as a midwife, doctor, or nurse—who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the postnatal period and in the identification, management and referral of complications in women and newborns.

MFH accomplishes its goals by training Haitian women to be SBAs and operating a mobile pre/postnatal clinic. The focus of this paper is on the mobile clinic portion of MFH's work.

SBA training—Through a 12-month intensive educational and clinical training experience, Haitian nurses and auxiliary nurses are trained to be SBAs (also known as auxiliary nursemidwives) by MFH Haitian and international maternal health experts (Floyd & Brunk, 2016). Graduates of the MFH training program make up 17% of skilled maternal healthcare providers in Haiti and are recognized by the country's Ministry of Public Health and

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Population (MFH, 2016a). Exhibiting task shifting, program graduates can assume tasks that more rigorously trained professionals (e.g., physicians or nurse practitioners) complete and are employed at birth centres, hospitals, and community organizations throughout Haiti, as well as with the MFH Prenatal Mobile Clinic. Further reading on MFH's task shifting work in training traditional birth attendants (i.e., *matrones)* and SBAs is described in detail in Floyd and Brunk (2016).

Mobile clinic—The mobile clinic is a pop-up clinic that provides community-based care to women in rural communities in Haiti's Central Plateau region (Floyd & Brunk, 2016). To reduce barriers to accessing maternal care, MFH offers pre/postnatal care for multiple communities in rural Haiti, where women often live 2 – 3 hours away from the closest health facility. Merging task shifting efforts with community-based care strategies, the mobile clinic employs six SBAs and operates monthly in 22 communities, performing 500 – 800 prenatal or postpartum exams per month and over 6,000 patient care visits annually (MFH, 2016a). Each clinic opens with a song and prayer (a Haitian custom), followed by health education, screenings for sexually transmitted infections, pre-and postnatal exams, and distribution of vitamins and dietary supplements. Treatment referrals and emergency transports to the nearest hospital are also provided as-needed. Despite MFH's success in employing both task shifting and community-based care to increase access to maternal care, little is known about patient perceptions of this approach.

Current Study

As most healthcare aims to improve quality of life, reduce symptoms, and minimize morbidity (facets of care primarily evaluated by patients), patient views are essential to developing, organizing, delivering, evaluating, and improving care (Black, 2013). Moreover, such perceptions circumvent observer bias and have the capacity to improve delivery of healthcare (Black, 2013). Despite research demonstrating the effectiveness of multipronged approaches for addressing negative maternal health outcomes, limited research has examined patient views of such approaches and no studies, to our knowledge, have examined patient perspectives of a model that combines task shifting and community-based care.

The current community-engaged study provides patient perspectives of maternal care at MFH mobile clinics, a community-based care model that employs task shifting. Specifically, this research aims to identify 1) factors that motivate women to obtain care at the mobile clinic, 2) their experience at the clinic, and 3) suggestions for clinic improvement. Study results will provide greater context for researchers and health professionals interested in combining task shifting with community-based care, or in improving associated service delivery in Haiti and other low-income countries.

Methods

The Institutional Review Board at the [University name redacted for double-blind review] approved study protocols and procedures.

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Procedure

Training—In this community-engaged research study, a Haitian MFH staff member worked collaboratively with two US-based researchers from [University name redacted for review]. In her typical work, this MFH staff member serves as a translator for foreign volunteers or visitors to MFH. She does not provide any patient care at mobile clinics. This MFH staff member (hereafter referred to as 'Interviewer') is trilingual (Haitian Creole, French, and English) and worked with the two US-based researchers while they were onsite for oneweek, to a) ensure the study design and methods were culturally appropriate, b) assist with participant recruitment, c) gather informed consent from participants, d) facilitate focus group sessions, and e) translate and transcribe focus group data.

After obtaining IRB approval, the two US-based research team members (both experienced in international community-based and qualitative research) trained the Interviewer in research ethics, using 'Community Involvement in Research' CIRTification (Anderson, 2012). This 3-hour training was designed specifically for community research partners without prior experience with research or familiarity with research ethics.

Next, the Interviewer participated in focus group data collection training, which outlined procedures for informed consent, the purpose of focus groups, effective facilitation skills, and ethical considerations associated with focus groups. After completing both trainings, she was given a certificate of completion and a monetary honorarium ($25 USD).

Data collection

Purposive sampling was employed to recruit participants from two mobile clinic sites. At the beginning of each mobile clinic, an announcement was made to inform attendees of the opportunity to participate in a discussion group about maternal healthcare experiences. Women were also informed that discussion groups would last 30 – 45 minutes and that they would be compensated with 100 Haitian Gourdes (approximately 1.60 USD) for their participation. To be eligible for participation, individuals had to receive care at the mobile clinic and be 18 years or older age.

Eight focus groups (four in Jacksonville and four in Roy Sec) were conducted over the course of two days in Haitian Creole, participants' native language. Average focus group duration was approximately 20 minutes and groups took place at mobile clinic locations in areas separate from clinic attendees. The Interviewer facilitated all focus groups, with occasional assistance from the two US-based researchers. One US-based researcher served as an interviewing coach ('Coach'). The second served as an observer ('Observer') and composed detailed field notes. Interviewer, Coach, and Observer were present in each group.

Focus groups began with the Interviewer reviewing confidentiality, then obtaining verbal consent for participation and permission to record the discussion. Participants then chose a '*fo no*,' or fake name (pseudonyms used in the groups, transcription, and this paper) to protect their identity and help ensure confidentiality. After completing individual, anonymized demographic interviews, participants were asked questions on their views and experiences about obtaining maternal care, specifically at the mobile clinic. After these questions, the Interviewer inquired if participants had additional questions or comments.

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Afterwards, participants were thanked and provided with the cash incentive. All discussions were audio recorded, translated into English, and transcribed by trained research team members.

Accounting for Language and Cultural Differences

As described above, the onsite research team consisted of 1) the Haitian-based Interviewer, fluent in Creole and English with five years' experience as a translator in maternal health settings, 2) the US-based Coach, with English fluency, limited proficiency in Creole, and three years' experience conducting research in Haiti, and 3) the US-based Observer, with intermediate French proficiency and previous research experience with Haitian-Americans. Having the Interviewer facilitate groups in Creole allowed her to clarify participant questions and explain or contextualize participant responses. Also, the Interviewer encouraged elaboration on unclear or vague statements, clarifying to ensure a valid understanding of responses (O'Connor, 2002).

Additionally, the onsite research team engaged in reflective practice by taking field notes and debriefing after each focus group (Cresswell, 2007), to reflect and discuss personal perceptions of data and strategies for improvement of data collection for subsequent groups. This helped the researchers become more familiar with cultural nuances and regionally-specific vernacular, while allowing assumptions and predispositions to be acknowledged, explained, and monitored (Arriaza et al., 2015).

Analytic methods

We conducted the study within the interpretive paradigmatic framework, which maximizes subjectivity and subsequently allows participants to be placed at the centre of the research. This approach provides marginalized groups the opportunity to share experiences and opinions in their own language and words. Additionally, the interpretive paradigm encourages researchers to explain research practices and use information gathered to produce meaning from the perspective of participants, rather than simply conduct observations (Burrell & Morgan, 1979; Denzin & Lincoln, 2011; Whitehead & McNiff, 2006). This approach highlights lived experiences and illuminates meaning of phenomena, through the eyes of participants (Cresswell, 2007).

While in Haiti, the Coach and Observer worked with the Interviewer and two additional, MFH-employed translators to transcribe the audio-recorded focus group data. Focus groups were translated to English during the transcription process. Later, a thirdparty reviewer (fluent in Haitian Creole and English) independently verified each of the transcripts, checking for and editing inconsistencies in translation.

Thematic data analysis was conducted based on qualitative research guidelines provided by Braun & Clarke (2006), outlined in five basic phases: 1) become familiar with the data, 2) generate initial codes, 3) identify themes, 4) review/revise themes, and 5) define and name themes. To develop the preliminary coding scheme, two trained researchers (Observer and another US-based researcher) reviewed the transcripts and underwent an open coding process, where they independently assigned codes to each unit (words, sentences, and/or phrases) of relevant data. After the initial coding phase, the researchers merged similar codes

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and met to reach consensus on coding discrepancies. Prevalent codes were those mentioned by multiple participants both within and across groups. These were grouped by similarity and relevance into themes and subthemes. Researchers then used *NVivo 10/11* software to independently code transcribed data. The analytic approach was iterative and involved continuous development of new codes and constant comparison of themes. These techniques helped to strengthen scientific rigor (O'Connor, 2002).

Results

Participants

A total of 57 women volunteered to participate in the interviews; 5 were denied participation as they were under age 18. Thus, interview participants were 52 Haitian women from two rural catchment areas in Centre Department, Haiti: Jacksonville ($n = 24$) and Roy Sec ($n = 28$). Participants resided within an approximately one and a half-hour radius ($M = 100.84$ minutes, $SD = 67.98$, Min = 5 minutes, Max = 300 minutes) from these areas, traveling either by foot ($n = 21$) or motorcycle ($n = 31$) to the mobile clinic sites. Participants ranged in age from 18 to 47 ($M = 29.4$, $SD = 7.07$). Approximately 48% of participants ($n = 25$) were living with their partner, 30.8% ($n = 16$) were married, 19.2% ($n = 10$) were single/never married, and 1.9% ($n = 1$) identified as a widow. The average number of pregnancies participants experienced was four ($M = 4.13$, $SD = 2.64$), and the average number of children was about three ($M = 2.96$, $SD = 2.54$).

Motivations for and Perceptions of Obtaining Mobile Clinic Care

When asked how they learned of the MFH mobile clinic, word of mouth was the most common source. Many women explained that they learned about the clinic through other pregnant women (relatives, friends, acquaintances), or past or present clients of MFH services. Several women noted they had brought or travelled with others that very day. Sasha (Roy Sec, age 47, 10 pregnancies) explained, "*This lady [touching person next to her] encouraged me to come. This lady already came to the clinic. When I heard about the clinic, I was encouraged to come… [I heard through] mouth to mouth [bouche en bouche].*" A few women described hearing announcements at church or in the market.

Motivations for seeking care at the mobile clinic were regularly linked to nearly universal, positive perceptions about the quality of care. For example, when asked about experiences at the mobile clinic, Matani (Roy Sec, age 29, three pregnancies) smiled and said, *'Here [at the mobile clinic], I like it. I like it - all things.'* Confirming sentiments shared across groups, Shelly (Jacksonville, age 20, three pregnancies) spoke on behalf of other attendees, *'We like the mobile clinic. We find good service there.*' In addition to highlighting positive experiences as key motivators for seeking care at the mobile clinic, other factors included the quality of care offered, clinic proximity, and being able to receive medicine and social encouragement. Overall, the most common reasons women cited for attending the mobile clinic were *the ability to access preventive care*, *affordability of care*, *health education sessions*, and *patient-centred style of care* offered by providers at the clinic.

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Preventive care—Many participants expressed coming to the clinic because they wanted preventive care. Women were confident that the SBAs could explain the status of their health and assist them in addressing any problems, potentially by referring them to more specialized care. One participant emphasized her trust in the education and skill of the mobile clinic SBAs (typically referred to as nurses by participants):

> We come here to get prenatal care. What the nurses study, we don't study it. They are in the position to … tell us what is good and [what's] not [good] for us. Thus, we have to come, so that they can do a proper check-up. If we would need an ultrasound, the nurses would send us to get an ultrasound to see how the baby is doing…If they have to refer us to a big hospital, they will refer us to a big hospital (Marie, Jacksonville, age 28, two pregnancies).

Many women, like Marie, saw the knowledge and ability of SBAs as key for protecting themselves and their babies. Relatedly, several women cited preventing or managing problems as motivations for accessing care. Naomi (Roy Sec, age 28, three pregnancies) explained how, '*[We come so that] they can see what kind of illness we have and control us [check-up] and protect the baby too*.' Participants understood that SBAs could refer clients for diagnostic testing or scans, if needed. They highlighted this as a crucial aspect of their maternal care experience. Chantal (Jacksonville, age 25, three pregnancies) described how, '*If something is going [wrong], then they can send you to do an ultrasound,'* and Benji (Jacksonville, age 35, five pregnancies) said, '*...if we don't feel good, the personnel will refer us … for consultation*.'

Affordability of care—Compared to other healthcare providers (hospitals or clinics), participants found the mobile clinic to be extremely inexpensive, a common reason for seeking care there. Lorie (Jacksonville, age 33, four pregnancies) said, *'[There are] less difficulties because the other places are further - here it's closer and it is less money. When you come to this clinic, you get almost free medications.'* Similarly, other participants described that affordable medications and exams were necessary, comparing MFH prices with the expensive costs at the nearest hospital. In one focus group, women spoke all at once, at times finishing each other's sentences, saying:

> All kinds of services, they do it very well. They consult us really good. They give us good medications... There are some examinations they do for you here …even in big hospitals you won't get them done. They don't have these kinds of examinations in Belladère. We would have to pay money to get this examination done (Roy Sec).

Given participants' financial constraints, inexpensive services and medication were especially persuasive in determining where to seek care. Chantal (Jacksonville, age 25, three pregnancies) agreed with another participant, who complimented MFH's inexpensive costs: '*Yeah, I would say the same thing. She mentioned that she only paid 25 goudes here* ($0.39 USD)*, in Byenfazens, it would have been 560 goudes* ($8.83 USD). *And you will [have to] buy pills for 350 goudes* ($5.52 USD).' While MFH prenatal care is low-cost, post-partum care is gratis and financial assistance for transport is provided. One woman implied that it was logical to come:

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> When you come with the baby, there is no money that you're paying. So normally if you deliver, it is important to come with your baby, so the nurse can check it, given that you're not even paying for that (Schneida, Jacksonville, age 28, five pregnancies).

Health education—Beyond affordable services, maternal health education motivated women to visit the mobile clinic. To one participant this was the most significant service she received:

> I like it because...the information, the education, I learned how to protect myself, how to live, and what to eat during the pregnancy. That's why we like it the most… (Renee, Jacksonville, age 22, two pregnancies).

Other participants expressed appreciation for knowledge about nutrition, hazards for the baby, and self-care during and after pregnancy. One woman added that this education helped to change older ways of thinking about her health and nutrition,

> There's a lot of things that we learn when the nurse is doing education. Now I know that when you deliver you can eat any food that you want. We had the old culture system [certain foods restricted after delivery] in our heads (Isabelle, Jacksonville, age 39, five pregnancies).

Patient-centred care—Participants had extremely favourable views of the mobile clinic SBAs and their approach to providing care. The SBAs used a patient-centred approach, where they provided individualized support in a caring and compassionate way. This emerged as instrumental to the positive perceptions of MFH care. As Caroline (Roy Sec, age 40, six pregnancies) said, '*everything that the nurses do, I like it. They take a lot of patience with us.*' A hallmark of patient-centred care is the notion that practitioners take the time to educate patients about their health and treatment, so that they can make informed joint decisions (Barry & Edgman-Levitan, 2012). One participant explained how the SBAs ensured that the women were informed, saying,

> I really appreciate the nurses because of the training they provide. When they talk to you, they ensure you really understand what the topic is about; sometimes there might be things you are not clear about. [If] you feel like you are in the dark, they'll help clarify (Rachel, Jacksonville, age 38, six pregnancies).

Other women echoed these remarks, adding that they want to encourage the SBAs, so they will continue working at the clinic. Matani (Roy Sec, age 29, six pregnancies) noted, '*they give us good care and they're so nice. I hope they will be encouraged…'* Beyond patience and kindness, women reported that SBAs arrange for transport to a local hospital, if medically necessary during their check-up. As one participant explained,

> When a woman is close to deliver, they will provide advice on the best place to go… like to the hospital in Hinche. And as well if it's an emergency…… they sometimes offer a ride to Hinche's hospital so that the woman can be protected (Renee, Jacksonville, age 22, two pregnancies).

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SBAs not only provided services such as maternal health care and health education, but they did it in a way that was patient and responsive to individual preferences and needs, consistent with the concept of patient-centred care (Institute of Medicine, 2001; Epstein & Street, 2011).

Results illustrate how the provision of MFH services are of dire importance to clinic attendees:

> Even when we [have to] spend time on the road, we just come. We will come even when the sun is hot [or] the sun is not hot. [When] we have money to pay the moto [or] we don't have money to pay the moto. We will come because we find the medicine, they are important for us (Stephanie, Roy Sec, age 30, four pregnancies).

Suggestions for clinic improvement

When asked how the mobile clinic could better meet their needs, most women reported that no improvements needed to be made. Several women from Jacksonville said '*We love everything. There is nothing to dislike.*' However, when probed further, two major themes emerged regarding suggested improvements: 1) closer and consistent access to the mobile clinic and 2) expanding services to include delivery and primary care services. Less cited needs included financial or material resources and greater coordination between MFH and other medical providers.

Closer & consistent access—Several participants noted they would be better served by establishing closer, more consistent access to maternal healthcare. Clinic distance from their homes, difficulties accessing transportation, and crossing bodies of water were cited as present challenges. As one woman said,

> I would like it [the mobile clinic] in Boukewon. For example, if the water comes up, the people on the other side cannot come… the people from Logalit, cannot cross the water to come here. And us, we can't cross the water to go to the clinic if the clinic is Logalit (Limone, Jacksonville, age 22, two pregnancies).

Beyond overcoming environmental barriers by having closer clinic locations, participants suggested a permanent, rather than rotating, mobile clinic would benefit them:

> Even though we have a location here at Jacksonville where we get prenatal care, we are borrowing it…we are doing it in a church. I would like if we had our own place for us. If we could have one or two nurses that would be stable at that place for us - there could be a hospital, a clinic, or a birth centre (Lorie, Jacksonville, age 33, four pregnancies).

Additionally, because of the rotating access to the mobile clinic, a few women recommended a hotline to contact SBAs during emergencies. One participant said,

> I would [like] to have a phone number in case if I have a problem so I can call, and you can help me. Even if you can't get to my house, you can stop midway, and I could meet you there (Roy Sec).

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Participants suggested that a phone hotline could coordinate care or provide life-saving advice to pregnant women in health crises.

Expanding services—Participants saw gaps in delivery and primary care services, with women traveling great distances to the nearest hospital. They suggested the mobile clinic could provide additional services to limit the need to access care from multiple places and potentially reduce maternal or child death (a topic referenced in five out of eight focus groups). Multiple women, speaking simultaneously and making it difficult to decipher their voices, described their desire for a birth centre or delivery care:

> One voice: Sometimes, when a person has labour at night, looking for motos at night, sometimes it's raining in the woods at night. If the person has to cross water, you can't cross the water, but if you have a birth centre close... Another voice: ...yes... in this case, someone can simply [help you] to walk ... [to the centre].
>
> Matani: There are some people that die because of taking too much time, not going to the hospital.
>
> Another voice: If it is raining in the woods… Linda: Sometimes the mom dies (Roy Sec).

Besides deliveries, a few participants cited the need for MFH to add primary care services. Jasmine (Jacksonville, age 36, five pregnancies) noted, '*As this is a prenatal clinic, if there could be a general mobile clinic for other kinds of illnesses where we could find all of the care we would want there.'*

Discussion

The MFH model of combining task shifting and community-based care eliminates several barriers to care, while also providing a patient-centred approach to healthcare. Participant views of the MFH model resonate with literature on the potential benefits of both task shifting and community-based care. Additionally, results provide insight into the specific aspects of the mobile clinic that women value and what motivates them to return.

The task shifting model used by MFH was well received by participants. Women often compared MFH services to other hospitals or clinics in the region, indicating that mobile clinic care was of higher quality, more affordable, and easier to access. Some women also contrasted the patient-centred care approach of the MFH SBAs with experiences from other service providers. These encounters sometimes involved maltreatment, verbal abuse, neglect, or differential treatment because of poverty. These reports are consistent with other research in Haiti that found social barriers to maternal health care, in the form of negative attitudes, prejudice, and stigma from healthcare providers (Peragallo Urrutia et al., 2012; Perkins et al., 2017).

Participants articulated that the SBAs' expertise provided necessary information for having healthy pregnancies. Consistent with patient-centred care, the SBAs took the time to ensure that each woman understood the information provided about her pregnancy. These women also highly rated the quality of care they received, as many spoke of the individualized

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attention they received from the SBAs. This quality care provided incentive for women to surmount geographic barriers to access prenatal care at the mobile clinic, while the clinic concurrently increased proximal access to care. These findings coincide with evidence that task shifting can provide comparable (or better) patient experiences in community-based settings (Seidman & Atun, 2017; Deller et al., 2015). Moreover, the MFH model expands access to rural sites by expanding the workforce and creating a cadre of service providers that may not otherwise exist (Floyd & Brunk, 2016).

In addition to increasing assess to care via increased numbers of providers, the mobile clinic served to expand affordable and accessible prenatal care for communities. Just as community health workers can refer difficult cases to expert care, participants perceived that the mobile clinic SBAs would refer them to specialized care if needed (Schiffman et al., 2010). Additionally, the current study demonstrates that the mobile clinic's communitybased care approach can provide a setting conducive to patient-centred care, which was well-received by participants. For example, the mobile clinic was described to be a valued source of preventive care and education, staffed by trusted and compassionate SBAs.

While participants provided strong, positive feedback about the program—and some made specific requests for researchers to 'encourage' the SBAs—environmental barriers to and service gaps in maternal healthcare were still cited by participants. Notably, the combination of task shifting and community-based care is not a panacea to remedy global healthcare inequalities or health worker shortages. Yet these strategies are useful tools in building capacity where infrastructure gaps, educational barriers, or emigration of skilled workers lead to inaccessible care (Foreit & Raifman, 2011). To achieve maximal effectiveness, task shifting and community-based care must be accompanied by policies and regulations, clarity of and boundaries for roles, articulation of needed skills and competencies, standardized training, and sufficient resources for sustainable and quality implementation (Deller et al., 2015).

Implications

Combining task shifting and community-based care may be a useful model for maternal healthcare delivery programs with similar resource, capacity, and topographical challenges. This model addresses barriers to access, such as physical accessibility by setting up clinics where there is need and attends to affordability by providing no or low-cost care. Furthermore, the model can create a workforce with the training necessary to provide skilled and quality care. The current study found that participants had positive perceptions of the MFH task shifting and community-based care model. These perspectives inform our understanding about what components of the MFH model are successful in the eyes of patients: preventative care, education, affordability, and quality care from the SBAs.

Women obtained maternal care via the MFH mobile clinic (versus other locations) because they valued quality, affordable, patient-centred preventive care. Some even travelled greater distances to access care with MFH—and were motivated to utilize its services—because of the quality, affordability, and patient-centred orientation. This underscores the significance of client perspectives on health seeking behaviours for researchers and practitioners involved with maternal health in Haiti and other underresourced locations: women value and will

prioritize such care. Health professionals should consider combining task shifting and community-based care as complimentary strategies that may be effective in reducing barriers to access (transportation, distance, financial) and increasing factors that influence motivation to attend (quality care). While not a focus of the current study, future research should evaluate how combining task shifting and communitybased care affects maternal health outcomes. Outcome evaluation on the MFH model can build on the perceived strengths cited by participants, enabling researchers, practitioners, and—critically—funders to examine the model's value for Haiti or other low-income countries.

Limitations

Several study limitations should be noted. First, data was self-reported, and participants may have shared what they felt was socially desirable or comfortable. Additionally, it is possible that participants' positive views were influenced by the experience of and access to the resources the mobile clinic offered in comparison to local facilities. Second, while steps were taken to ensure accuracy of the transcripts, meaning *may* have been lost in the process of translation from Haitian Creole to English. Third, the study sampled women from two mobile clinic sites; MFH operates 22 different clinic locations on a rotating basis. Women at other sites may have provided alternative perspectives and views from the present sample.

Conclusion

Being a pregnant woman in rural Haiti can be a death sentence, demonstrating the need for immediate and effective maternal health interventions. Although task shifting and community-based care are useful strategies for addressing global maternal health disparities, implementation must consider community perceptions. Acquiring such knowledge is necessary for achieving more efficacious and sustainable health programming.

This study provides evidence of positive patient perceptions of the MFH model and demonstrates the need for future evaluation research. The MFH model, upon further study, could positively address maternal healthcare access in other settings around the globe.

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References

Amibor P (2013). What will it take to maintain the maternal and child health gains made in Haiti prior to the 2010 earthquake? Maternal and Child Health Journal, 17(8), 1339–1345. [PubMed: 23108736]

Anderson EE (2012). CIRTifcation: Community Involvement in Research Training. Facilitator Manual. Chicago, IL: Center for Clinical and Translational Science, University of Illinois at Chicago Retrieved from http://www.ccts.uic.edu/content/about-cirtification

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Arriaza P, Nedjat-Haiem F, Lee HY, & Martin SS (2015). Guidelines for conducting rigorous health care psychosocial cross-cultural/language qualitative research. Social work in public health, 30(1), 75–87. [PubMed: 25375998]

Austin A, Langer A, Salam RA, Lassi ZS, Das JK, & Bhutta ZA (2014). Approaches to improve the quality of maternal and newborn health care: an overview of the evidence. Reproductive Health, 11(Suppl 2), S1 10.1186/17424755-11-S2-S1

Azad K, Barnett S, Banerjee B, Shaha S, Khan K, Rego AR, … Costello A (2010). Effect of scaling up women's groups on birth outcomes in three rural districts in Bangladesh: a cluster-randomised controlled trial. The Lancet, 375(9721), 1193–1202. 10.1016/S0140-6736(10)60142-0

Barnes-Josiah D, Myntti C, & Augustin A (1998). The 'Three Delays' as a framework for examining maternal mortality in Haiti. Social Science and Medicine, 46(8), 981–993. [PubMed: 9579750]

Barry MJ, & Edgman-Levitan S (2012). Shared decision making — the pinnacle of patientcentered care. New England Journal of Medicine, 366(9), 780–781. 10.1056/NEJMp1109283 [PubMed: 22375967]

Black N (2013). Patient reported outcome measures could help transform healthcare. *BMJ* (Clinical research ed), 346, f167.

Braun V & Clarke V (2006). Using thematic analysis in psychology. Qualitative research in psychology, 3(2), 77–101.

Burrell G, & Morgan G (1979). Sociological paradigms and organizational analysis. Aldershot, England: Ashgate.

Cianelli R, Mitchell E, Albuja L, Wilkinson C, Anglade D, Chery M, & Peragallo N (2014). Maternal – child health needs assessment in Haiti. International Journal of Applied Science and Technology, 4(5), 30–38. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4469393/ [PubMed: 26097809]

Darmstadt GL, Lee AC, Cousens S, Sibley L, Bhutta ZA, Donnay F, Osrin D, Bang A, Kumar V, Wall SN, Baqui A and Lawn JE (2009), 60 million non-facility births: Who can deliver in community settings to reduce intrapartum-related deaths? International Journal of Gynecology & Obstetrics, 107, 89–112. doi: 10.1016/j.ijgo.2009.07.010

Dawson AJ, Buchan J, Duffield C, Homer CSE, & Wijewardena K (2014). Task shifting and sharing in maternal and reproductive health in low-income countries: a narrative synthesis of current evidence. Health Policy and Planning, 29(3), 396–408. 10.1093/heapol/czt026 [PubMed: 23656700]

Deller B, Tripathi V, Stender S, Otolorin E, Johnson P, & Carr C (2015). Task shifting in maternal and newborn health care: Key components from policy to implementation. International Journal of Gynecology & Obstetrics, 130, S25–S31. 10.1016/j.ijgo.2015.03.005 [PubMed: 26115853]

Denzin NK, & Lincoln YS (Eds.). (2011). The Sage handbook of qualitative research. Thousand Oaks, CA: Sage.

Durham J, Michael M, Hill PS, & Paviignani E (2015). Haiti and the health marketplace: the role of the private, informal market in filling the gaps left by the state. BMC health services research, 15(1), 424. [PubMed: 26416252]

Ejembi CL, Norick P, Starrs A, & Thapa K (2013). New global guidance supports community and lay health workers in postpartum hemorrhage prevention. International Journal of Gynecology & Obstetrics, 122(3), 187–189. doi: 10.1016/j.ijgo.2013.05.001 [PubMed: 23796260]

Epstein RM, & Street RL (2011). The values and value of patient-centered care. Annals of Family Medicine, 9(2), 100–103. 10.1370/afm.1239 [PubMed: 21403134]

Foreit J & Raifman S (2011). Increasing access to Family Planning (FP) and Reproductive Health (RH) services through task-sharing between Community Health Workers (CHWs) and community midlevel professionals in large-scale public-sector programs: A literature review to help guide case studies. Population Council/United States Agency for International Development (USAID) Retrieved from http://chwcentral.org/sites/default/files/Increasing%20access%20to%20FP%20and%20RH%20through%20task-sharing_A%20Literature%20Review.pdf

Floyd BOM, & Brunk N (2016). Utilizing task shifting to increase access to maternal and infant health interventions: A case study of Midwives for Haiti. Journal of Midwifery & Women's Health, 61(1), 103–111.

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Gessessew A, Barnabas GA, Prata N, & Weidert K (2011). Task shifting and sharing in Tigray, Ethiopia, to achieve comprehensive emergency obstetric care. International Journal of Gynecology & Obstetrics, 113(1), 28–31. 10.1016/j.ijgo.2010.10.023 [PubMed: 21315350]

Gilmore B, & McAuliffe E (2013). Effectiveness of community health workers delivering preventive interventions for maternal and child health in low- and middle-income countries: A systematic review. BMC Public Health, 13(1). 10.1186/1471-2458-13-847

Institute of Medicine (US) Committee on Quality of Health Care in America. (2001). Crossing the quality chasm: A new health system for the 21st century. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK222274

Kassebaum NJ, Bertozzi-Villa A, Coggeshall MS, Shackelford KA, Steiner C, Heuton KR, ... & Templin T (2014). Global, regional, and national levels and causes of maternal mortality during 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. The Lancet, 384(9947), 980–1004. doi: 10.1016/S0140-6736(14)60696-6

Kligerman M, Walmer D, & Bereknyei Merrell S (2017). The socioeconomic impact of international aid: a qualitative study of healthcare recovery in post-earthquake Haiti and implications for future disaster relief. Global Public Health, 12(5), 531–544. 10.1080/17441692.2015.1094111 [PubMed: 26565063]

Midwives for Haiti. (2016a). Programs. Retrieved from https://midwivesforhaiti.org/programs/

Midwives for Haiti. (2016b). Our funding. Retrieved from https://midwivesforhaiti.org/ourfunding/

O'Connor MK (2001). Using qualitative research in practice evaluation In Roberts AR and Greene GJ (Eds.), Social workers' desk reference (pp. 775–778). New York: Oxford University Press.

Pacagnella RC, Cecatti JG, Osis MJ, & Souza JP (2012). The role of delays in severe maternal morbidity and mortality: expanding the conceptual framework. Reproductive Health Matters, 20(39), 155–163. doi: 10.1016/S0968-8080(12)39601-8 [PubMed: 22789093]

Peragallo Urrutia R, Merisier D, Small M, Urrutia E, Tinfo N, & Walmer DK (2012). Unmet health needs identified by Haitian women as priorities for attention: a qualitative study. Reproductive Health Matters, 20(39), 93–103. 10.1016/S0968-8080(12)39602-X [PubMed: 22789086]

Perkins J, Capello C, Vilgrain C, Groth L, Billoir H, & Santarelli C (2017). Determinants of low maternal and newborn health service utilization in Haiti: A Community-based cross-sectional study. Journal of Women's Health, Issues and Care, 6(1). 10.4172/2325-9795.1000258

Schiffman J, Darmstadt GL, Agarwal S, & Baqui AH (2017). Community-based intervention packages for improving perinatal health in developing countries: A review of the evidence. Seminars in Perinatology, 34(6), 462–476. 10.1053/j.semperi.2010.09.008

Seidman G, & Atun R (2017). Does task shifting yield cost savings and improve efficiency for health systems? A systematic review of evidence from low-income and middleincome countries. Human Resources for Health, 15(1). 10.1186/s12960-017-0200-9

Tripathy P, Nair N, Barnett S, Mahapatra R, Borghi J, Rath S, … Costello A (2010). Effect of a participatory intervention with women's groups on birth outcomes and maternal depression in Jharkhand and Orissa, India: a cluster-randomised controlled trial. The Lancet, 375(9721), 1182–1192. 10.1016/S0140-6736(09)62042-0

Williams K, Joizil P, Dufort E, Jurkowski J, Morvillo J, Polsinelli V, … Waxman M (2015). Assessing access to maternal healthcare in rural Haiti. Annals of Global Health, 81(1), 177 10.1016/j.aogh.2015.02.905

Whitehead J, & McNiff J (2006). Action research: Living theory. Thousand Oaks, CA: Sage.

World Health Organization. (2004). Making pregnancy safer: The Critical Role of the Skilled Attendant: A joint statement by WHO, ICM and FIGO. Retrieved from: http://www.who.int/maternal_child_adolescent/documents/9241591692/en/WorldHealthOrganization(2008).

Task shifting: Rational redistribution of tasks among health force work teams – global recommendations and guidelines. Geneva, Switzerland Retrieved from http://www.who.int/healthsystems/TTR-TaskShifting.pdf?ua=1

World Health Organization (2014). Trends in Maternal Mortality: 1990–2013. Estimates developed by WHO, UNICEF, UNFPA, The World Bank, and the United Nations Population Division. Geneva, Switzerland Retrieved from http://www.who.int/reproductivehealth/publications/monitoring/maternalmortality-2013/en/

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Highlights

- Participants positively evaluated services from a mobile maternal health clinic
- Health education and affordable, patient-centred care motivated clinic attendance
- Participants provided various recommendations to improve clinic services