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Evaluation of Services Provided to Pregnant African Refugees by Catholic Social Services Refugee Resettlement Agency in Dayton Ohio

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Table of Contents

Abstract

In 2016 Public Health - Dayton and Montgomery County declared birth outcomes the number one priority in their Community Health Improvement Plan. To improve the infant mortality rate (IMR), racial disparities must be address and considerations should be given to Dayton's newest and most vulnerable neighbors. Dayton receives between 200 and 250 refugees each year, 70% of whom are from the Democratic Republic of the Congo. African refugees have higher infant mortally and poorer birth outcomes than native populations in the U.S. Early and regular prenatal care is protective against infant mortality, and African refugees consistently report delayed and infrequent prenatal care. Five categories affect utilization of prenatal services by African refugees; migration factors, cultural factors, treatment and communication factors, socioeconomic and accessibility factors, and social and psychological factors. This paper describes the services that Catholic Social Services (CSS) Refugee Resettlement Agency provides to newly-arrived pregnant refugees and compares these services to published guidelines and best practice models. When compared, CSS provide adequate services to address socioeconomic and accessibility factors through funding provided by the Department of State. While CSS provided some services towards the other four categories, none of them are comprehensive. The acculturation process provides an opportunity for CSS to address migration and cultural factors. But it is through strong community partnerships with local stakeholders that CSS can provide comprehensive services to address all the factors that affect prenatal care utilization in African refugees.

Key words: Democratic Republic of Congo, infant mortality, Montgomery County prenatal care, racial disparities

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Over the last 50 years, medical advancements have led to a significant decline in the infant mortality rate (IMR) in the United States (U.S.); between 2005-2013, the IMR in the U.S. dropped 13% from 6.86 deaths per 1,000 live births to 5.96 (Mathews, MacDorman, & Thoma, 2015). In 2013, the Healthy People 2020 national goal to decease the IMR to six per 1,000 births was achieved (Healthy People 2020, 2016). Although the national IMR has declined to the Healthy People 2020 goal, the decline is not homogenous across states and significant racial disparities continue to be observed. Across the U.S. the infant mortality rate is consistently higher in Southern and Mid-Western states and is two times higher in African Americans than Caucasian Americans (Mathews et al., 2015).

Ohio has the fifth highest infant mortality rate in the United States (Ohio Department of Health [ODH], 2015). Although Ohio's IMR remains one of the highest in the U.S., between 2005 and 2013, the state IMR declined 10% from 8.17 to 7.33 (Mathews et al., 2015). The racial disparities are even more pronounced in Ohio than they are nationally. The IMR in African Americans in Ohio is three times higher than that of Caucasians (Mathews et al., 2015). In 2013, Dayton and Montgomery County had the sixth highest rate in Ohio with an IMR of 9 deaths per 1,000 live births. In 2014 the IMR in Dayton and Montgomery County dropped to 6.1, a significant improvement from12 years of a rising IMR. However, the IMR increased again in 2015 to 7.5 deaths per 1,000 live births (Public Health - Dayton & Montgomery County [PHDMC], 2016). The racial disparities are particularly pronounced in Dayton and Montgomery County; in 2014, the IMR in African Americans was 12.8, four times higher than Caucasian Americans who have an IMR of 3.8 (PHDMC, 2016).

The unstable and increasing IMR, and the disparities between African Americans and Caucasian Americans, has earned Montgomery County a spot as one of nine partnering communities in the Ohio Institute for Equity in Birth Outcomes whose purpose is to improve infant mortality in Ohio's worst communities (ODH, 2015). Efforts are underway to improve the IMR in Dayton and Montgomery County. In the 2014 Community Health Assessment performed by Public Health - Dayton and Montgomery County (PHDMC), infant mortality was highlighted as a special interest to the community (PHDMC, 2014). In 2016, PHDMC published their Community Health Improvement Plan and named birth outcomes as the number one priority to improve the health of the community (PHDMC, 2016). It is imperative however that all members of the community are included in this effort, including the city's newest and most vulnerable neighbors.

Dayton and Montgomery County is a welcoming community and receives 200 to 250 refugees a year. About 70% of all refugees arriving in Dayton and Montgomery County are from the Democratic Republic of the Congo in Central Africa (Catholic Social Services, 2017). Refugees face unique social, cultural and physical challenges that contribute to their health outcomes (Philbrick, Wicks, Harris, Shaft, & Van Vooren, 2017). Understanding the obstacles that refugees face and taking these into consideration when developing and implementing public health intervention will ensure that health disparities are not created or perpetuated.

Research on birth outcomes in refugee women in the United States is limited. A 2016 study revealed that African born refugees in Utah are more like to experience birth and infant complications, and have a higher IMR than native-born women (Dyer & Baksh, 2016). This situation is not unique to Utah; the general finding is that sub-Saharan African refugees in most developed countries experience worse maternal and infant outcomes (Carolan, 2010). Research

shows increased incidence of preterm birth, low birth weight, and infant mortality in African refugees when compared to native-born women (Carolan, 2010; Dyer & Baksh, 2016).

Early and regular prenatal care is protective against infant mortality and adverse birth outcomes (Khanani, Elam, Heam, Jones, & Maseru, 2010). Women who do not get prenatal care are more likely to birth a baby with low birth weight, experience preterm delivery and to die during childbirth (Office on Women's Health, 2012). African refugees consistently report delays in seeking prenatal care and inconsistencies in obtaining care in developed countries (Carolan, 2010). African-born refugees are often grouped with native-born African American populations; this generalization is a disservice to this population. While there are some shared challenges, African refugees often encounter unique barriers when accessing care, including psychological traumas, lack of knowledge about western health care structure, and language and cultural differences (Dyer & Baksh, 2016).

Catholic Social Services Refugee Resettlement Agency facilitates the integration of newly arrived Congolese refugees into the Dayton and Montgomery County community. Community organizations, health care providers, and policy makers must be made aware of the specific challenges that face African refugees to adequately serve them (Wachter, Heffron, Snyder, & Nsonwu, 2016). As Dayton and Montgomery County tackle the infant mortality rate in the community, it is imperative that solutions and interventions are developed for all community members. Learning about challenges may improve birth outcomes, reduce complications and decrease the IMR in the African refugee population (Dyer & Baksh, 2016).

Statement of Purpose

The purpose of this study is to describe the services provided by Catholic Social Services Refugee Resettlement Agency to pregnant Congolese refugees in Dayton, Ohio, and compare these services to published best practice guidelines and models. This paper will:

1. Determine factors that affect refugee women accessing prenatal care;
2. Evaluate how Catholic Social Services Refugee Resettlement Agency addresses the factors;
3. Compare the services provided by Catholic Social Services to published guidelines and models.

Literature Review

What is a Refugee?

Article 1(A)(2) of The United Nations' 1951 *Convention Relating to the Status of Refugees* defines a refugee as any person who:

> *"owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality, and is unable to, or owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it*" (Weis, 1990, p. 6).

In other words, a refugee is a person forced from their country out of legitimate fear for their personal safety. Recent political conflicts have caused a surge in the number of displaced persons globally. According to the United Nations over, 60 million people haves left their homes due to threats and conflicts in their state or country of origin. More than 20 million people have fled

their countries as refugees, and over 40 million has fled their home states and remain in their countries as internally displaced people (United Nations High Commissioner for Refugees, 2017).

The United Nations Refugee Agency reports 2015 as the year with the highest number of submissions for refugee status. Submissions increased at an alarming rate from 74,840 in 2012 to 134,044 in 2015 (see Figure 1), a 79% increase in four short years (United Nations High Commissioner for Refugees, 2016). Countries with the most submissions for refugee status historically include Myanmar, Iraq, Somalia and the Democratic Republic of the Congo. However, the outbreak of conflict in Syria in 2011 made Syria the country with the most submissions in 2015.

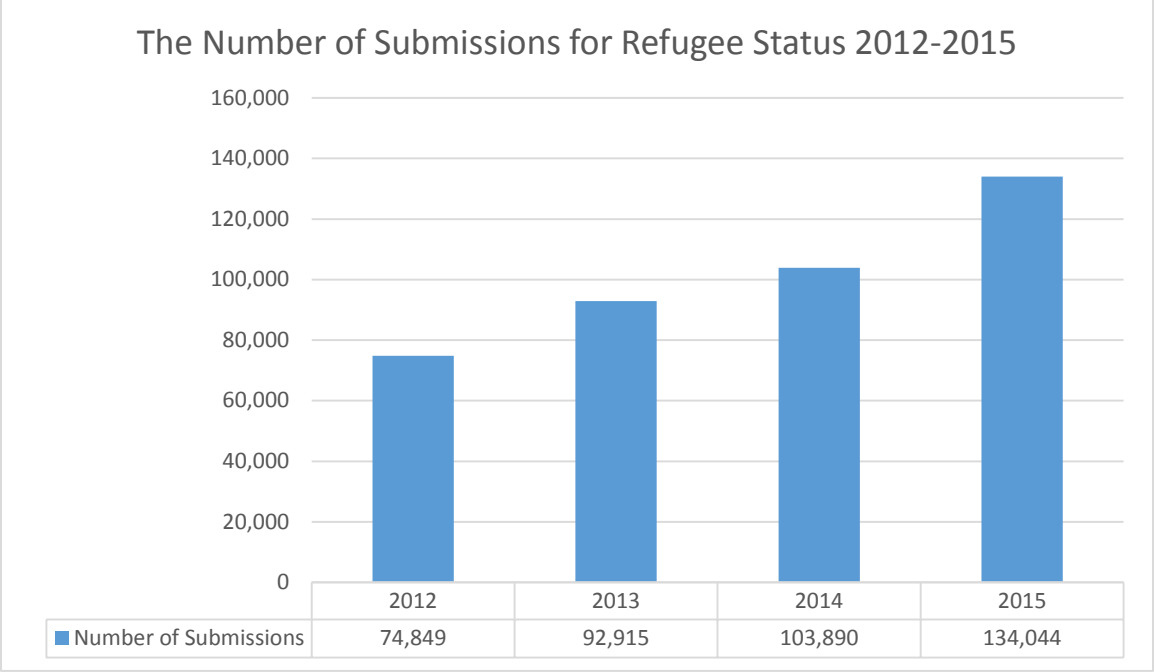


Figure 1. The number of submissions for refugee status, 2012-2015. Data from the United Nations High Commissioner for Refugees, *UNHCR projected global resettlement needs 2017*, (Geneva: UNHCR, 2016).

In 2015, the top three countries for admission included the United States of America (82,491), Canada (22,886), and Australia (9,321) and there were over 11,000 submissions to the European Union (see Figure 2) (United Nations High Commissioner for Refugees, 2016).

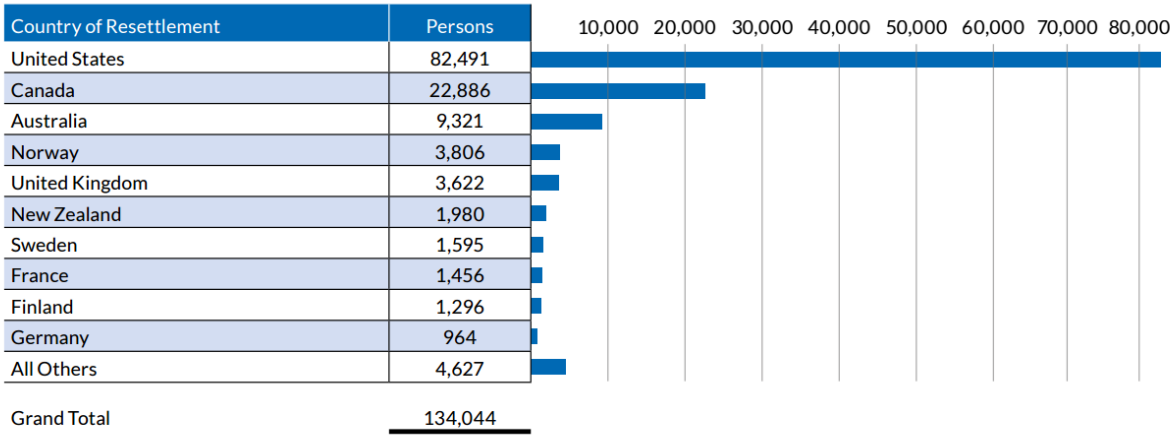


Figure 2. Number of submissions by resettlement country in 2015. Graph from the United Nations High Commissioner for Refugees, *UNHCR projected global resettlement needs 2017*, (Geneva: UNHCR, 2016).

Refugees seek resettlement for a variety of reasons, including legal/protection needs, lack of foreseeable alternatives, violence and/or torture, risk to women and girls, medical needs, and family reunification (United Nations High Commissioner for Refugees, 2017). With emerging and continued conflict in Iraq, Syria, South Sudan, and Central Africa the United Nations reports that the resettlement needs of refugees grossly outnumber the current capacity. The United Nations High Commissioner for Refugees predicted that in 2017, the global resettlement need will be over 1,190,000 persons with Syrians accounting for 40% of the need (United Nations High Commissioner for Refugees, 2016).

Refugee resettlement. Resettlement is a complicated and time-consuming process that could take anywhere from 18 to 24 months. Resettlement is achieved through a public-private

model that includes private community organizations, typically faith-based organizations, and monetary support from the federal government (Eby, Iverson, Smyer, & Keki, 2011). The United Nations High Commissioner for Refugees refers applicants for refugee status to the U.S. Department of State which connects refugees to one of nine regional resettlement support centers. These centers interview refugees and perform medical and security screenings before requesting sponsorship by a resettlement agency (Philbrick et al., 2017).

Catholic Social Services of the Miami Valley is responsible for refugee resettlement in Dayton and surrounding counties. Catholic Social Services Refugee Resettlement Agency is under the United States Conference of Catholic Bishops (USCCB) (Catholic Social Services, 2017). The USCCB is a voluntary resettlement agency that acts as a liaison between the State Department, the Office of Refugee Resettlement, and local refugee resettlement agencies (Mott, 2010). The Migration and Refugee Services department of USCCB includes over 100 offices and resettles about 30% of all refugees in the U.S. each year (United States Conference of Catholic Bishops [USCCB], 2017).

Per the Refugee Council USA, in 2013, Ohio welcomed 2,788 refugees, 3.9% of all refugees in the U.S. The largest refugee populations in Ohio are from Bhutan, Burma, Iraq, Somalia, and the Democratic Republic of the Congo (Refugee Council USA, 2017). Catholic Social Services works with state and local organizations to provide resettlement services to the community's newest neighbors and to aid in their journey towards self-sufficiency (Catholic Social Services, 2017). The local resettlement program at Catholic Social Services resettles 200 to 250 refugees each year into the Dayton communities. Historically refugees arrived from Iraq, Democratic Republic of Congo, Ethiopia, Bhutan, Eritrea, Columbia, Afghanistan and Sudan.

Today about 70% of all refugees in Dayton are from the Democratic Republic of Congo (Catholic Social Services, 2017).

An important responsibility of resettlement agencies is acculturation and community integration (Catholic Social Services, 2017). Resettlement agencies act as advocates and experts on the needs of the individuals that they serve. These agencies are the necessary link between refugees and the community and significantly increase the likelihood that refugees will succeed in their new environment (Mott, 2010). One very vital component of the integration process is introducing refugees to the American health care system. Establishing connections with health providers is a required part of the resettlement process, and it ensures access to services to maintain the health and wellbeing of refugees (Mott, 2010).

Infant Mortality

Infant mortality is an indicator of the health and wellbeing of a community. Factors that lead to infant mortality also affect the general health of the entire population. The infant mortality rate (IMR) is the number of infant deaths during the first year of life for every 1,000 live births (Centers for Disease Control and Prevention [CDC], 2016). In 2014, more than 23,000 infants in the United States did not see their first birthday, an IMR of approximately six infant deaths for every 1,000 live births (CDC, 2016). With the advancements in medicine, this number is a dramatic improvement from what it was 50 years ago. However, racial disparities remain high, with African Americans' IMR consistently two times higher than Caucasian Americans' (CDC, 2016).

Ohio has the fifth highest IMR in the U.S., and racial disparities are even more pronounced in Ohio than they are nationally (Mathews et al., 2015). In 2015, the IMR in Ohio increased, after witnessing a decrease in 2013 (see Table 1) (ODH, 2015). The IMR for African

Americans in Ohio is three times higher than those of Caucasian Ohioans (see Table 1). Over the last five years, the IMR has decreased in Ohio but not at the rate of decrease nationally (10% vs. 13%) (Mathews et al., 2015). In alignment with the Healthy People 2020 objective, the Ohio Department of Health has established a goal IMR of fewer than six deaths per 1,000 live births across race and ethnicity (ODH, 2015). A goal Ohio has yet to achieve.

Table 1

Ohio Infant Mortality Rate in Number of Deaths per 1000 Live Births (2013-2015)

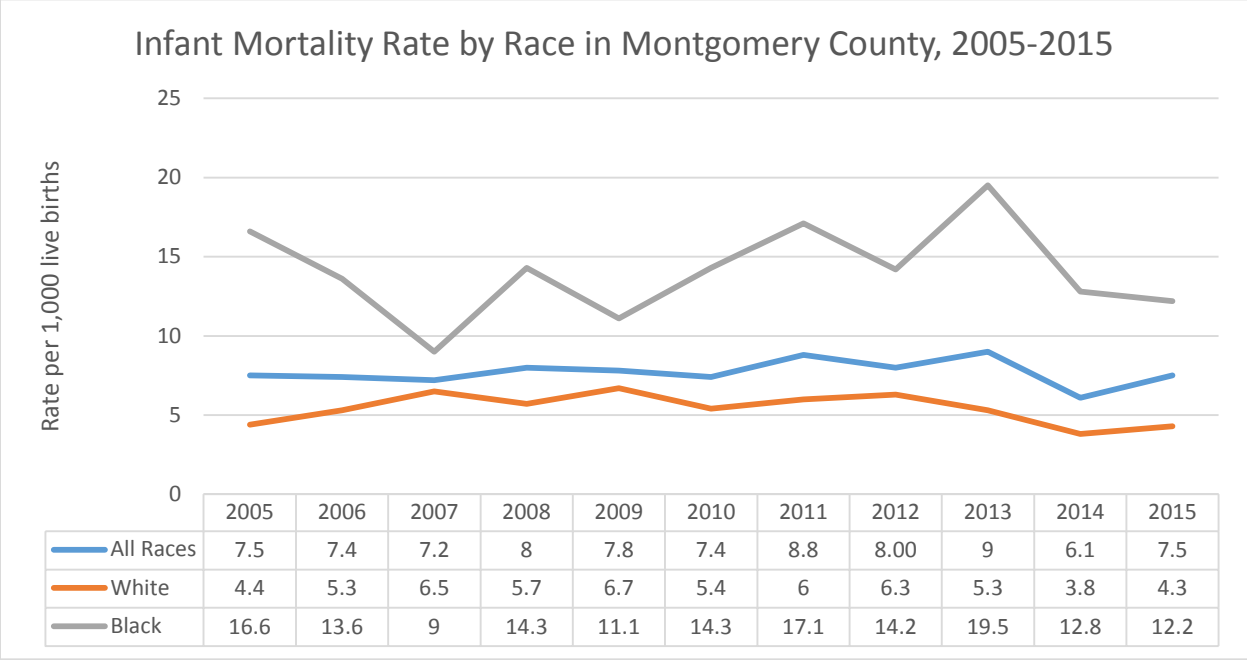
Group	2013	2014	2015
All Races	7.4	6.8	7.2
Race			
White	6.0	5.3	5.5
Black	13.8	14.3	15.1
Ethnicity			
Hispanic	8.8	6.2	6.0
Non-Hispanic*	7.3	6.9	7.3

Source: Adapted from the Ohio Department of Health, *2015 Ohio Infant Mortality Data: General Findings*.

*Non-Hispanic births and deaths include those of unknown ethnicity

Dayton and Montgomery County haves not experienced the declining trend witnessed in the State of Ohio and in the nation. The IMR in Dayton and Montgomery County was 7.5 deaths per 1,000 live births in 2015, an increase from an IMR of 6.1 in 2014 (ODH, 2015; PHDMC, 2014). In fact, the IMR in Dayton and Montgomery County has been highly variable with no discernable trend over the last ten years (see Figure 3). The racial disparities between African Americans and Caucasians, however, have remained constant. The IMR in African Americans in

Dayton and Montgomery County is three times that of Caucasian Americans (PHDMC, 2016). If the IMR indicates the health of a community, the health and wellbeing of Dayton and Montgomery County has not improved since 2005. The unstable infant mortality rates and consistent racial disparities are major public health concerns.



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
All Races	7.5	7.4	7.2	8	7.8	7.4	8.8	8.00	9	6.1	7.5
White	4.4	5.3	6.5	5.7	6.7	5.4	6	6.3	5.3	3.8	4.3
Black	16.6	13.6	9	14.3	11.1	14.3	17.1	14.2	19.5	12.8	12.2

Figure 3. Infant mortality rate in Montgomery County from 2005-2015. Data from the Ohio Department of Health, *2015 Ohio Infant Mortality Data: General Findings* and Public Health - Dayton & Montgomery County, 2016 *Community Health Improvement Plan* and *2015 Annual Report.*

These grim outcomes have earned Montgomery County a role as one of the partnering communities in the Ohio Institute for Equity in Birth Outcomes (http://www.citymatch.org/projects/ohio-iebo). The Ohio Institute for Equity in Birth Outcomes is comprised of nine cities identified by the Ohio Department of Health "to improve birth outcomes and reduce the racial disparities in infant deaths" (ODH, 2016, "About the Ohio Equity Institute", first sentence). Public Heath - Dayton and Montgomery County has also named infant

mortality as a special interest in their 2014 Community Health Assessment and the number one priority in the 2016 Community Health Improvement Plan (PHDMC, 2014; PHDMC, 2016).

The major cause of infant deaths in the U.S. includes birth defects, preterm births, complications during pregnancy, sudden infant death syndrome, and injuries (CDC, 2016). In Dayton and Montgomery County, prematurity and low birth weights are the main causes of infant deaths followed by congenital malformation and chromosomal abnormalities (PHDMC, 2014). There are protective measures that can reduce the risk of infant death. These include ensuring that mom is healthy before pregnancy, early and regular prenatal care during pregnancy, adequate medical care post-partum, and a safe living environment for both mom and baby (PHDMC, 2014).

Preconception health. Half of all pregnancies in the U.S. are unplanned, making preconception health very important for a healthy pregnancy and a healthy baby (PHDMC, 2014). Preconception health includes managing existing medical conditions, consuming a nutritious diet and vitamin supplements, maintaining a healthy BMI, and avoiding specific medications and substances (Frayne et al., 2016). In Montgomery County, more than 50% of women were overweight or obese before pregnancy and more than 50% of women did not take multivitamins (PHDMC, 2014). In addition to poor nutrition, more women in Dayton reported alcohol and tobacco use at least three months prior to pregnancy than women in neighboring cities (PHDMC, 2014). Preconception health and behaviors has been shown to influence birthweight and gestational age (Moss & Harris, 2015). It is recommended that the promotion of preconception health in reproductive age women be of high priority to ensure the wellbeing of women and children (Frayne et al., 2016).

Prenatal care. Prenatal care, also known as antenatal care, is the health care a woman receives during the time she is pregnant. Women should receive prenatal care early and regularly during pregnancy to monitor both their health and the health of the developing fetus (Office on Women's Health, 2012). Health care providers can recognize and treat health problems early, preventing long-term effects. Physicians also discuss what to expect during their pregnancy, build a trusting relationship with the expecting mom, and ensuring a safe and healthy delivery (Office on Women's Health, 2012). It is recommended that moms see their healthcare provider once a month during weeks 4 through 28, twice a month weeks 28 through 36, and weekly during week 36 to birth (Office on Women's Health, 2012).

The number of women in Montgomery County receiving late or no prenatal care has increased over the last five years (PHDMC, 2014). Women who do not get prenatal care are three times more like to birth a baby with low weight and five times more likely to die than women who do receive prenatal care (Office on Women's Health, 2012). Those who received inadequate prenatal care have a 2.1 to 2.8 times greater risk of preterm delivery (Krueger & School, 2000). Prenatal care also helps prevent complication such as high blood pressure, gestational diabetes, preeclampsia, and birth defects (National Institute of Child Health and Human Development, 2016).

Life course perspective. The Secretary Advisory Committee on Infant Mortality recognizes that to further improve the infant mortality rate in the U.S. we must adopt a life course perspective (Lu & Johnson, 2014). The life course perspective establishes that stages in life are not disconnected, and that the outcome of birth is not just a product of nine months. The committee states that birthing outcomes are linked to the mother’s life before she became pregnant and even before her own conception (Lu & Johnson, 2014). The Secretary Advisory

Committee on Infant Mortality called for a paradigm shift that includes both a clinical and a population based approach that addresses the individual factors as well as social determinants of health (Lu & Johnson, 2014).

The American Public Health Association (APHA) defines social determinants of health "as the conditions in which you live, learn, work, and age that affects your health" (The American Public Health Association, 2016, Social Determinants of Health). These determinants include your neighborhood, education, and socioeconomic status. The APHA has called for public health on all levels, national, state and local, to make social determinants of health a priority when evaluating health issues and developing interventions (The American Public Health Association, 2016). Historically, race has been a determining factor for socioeconomic status and health disparities. In the U.S., African Americans are consistently overrepresented as the poorest in our population and this has impacted their health outcomes (Subban, Terwoord, & Schuster, 2008).

African-born Refugees

African-born refugees are often grouped with native-born African American populations; this generalization does a disservice to this population. There are some shared challenges between African-born refugees and African Americans--lower socio-economic status, lower education, and effects of institutional racism are all determinants that effect IMR in both populations (Subban et al., 2008; Dyer & Baksh, 2016). However, African refugees have a much different life course than African Americans and often encounter unique barriers when accessing care (Dyer & Baksh, 2016). These barriers include psychological traumas, lack of knowledge about western health care structure, and language and cultural differences (Dyer & Baksh, 2016).

Pre-migration refugees face a host of adversities including, loss of their home and family, torture, starvation, and gender-based violence (Wachter et al., 2016).

Infant mortality in African-born refugees. Dryer and Baksh (2016) found that African-born women in Utah were more likely to experience birth and infant complications. They were more likely to require a cesarean section, experience rapid labor, breech or fetal malposition, difficult labor, and excessive bleeding when compared to white non-Hispanic women (Dyer & Baksh, 2016). The infants were at greater risk of fetal distress, small size for gestational age and infant death. African-born pregnant women in this study were also more likely to have other risk factors that predisposed them to adverse outcomes, such as low education, age below 20 and over 40, multiple pregnancies, being a single parent, and having previous medical conditions (Dyer & Baksh, 2016).

Preconception health in African-born refugees. Studies reveal that poor preconception health in African-born refugees often leads to high-risk pregnancies (Carolan, 2010). Pregnant African refugees are more likely to present with malnutrition, psychological trauma, and inconsistent access to medical care (Carolan, 2010). Anemia, infection, and systemic diseases affect the health status of women prior to pregnancy (Carolan, 2010; Dyer & Baksh, 2016). Many women have experienced frequent pregnancies, undocumented complications during childbirth, and untreated chronic diseases (Carolan, 2010; Dyer & Baksh, 2016). Women's medical histories are often incomplete and health care providers lack knowledge about these unique preconception factors. Knowledge of these factors will better prepare health care professionals and improve service to African refugees (Carolan, 2010).

Prenatal care in African-born refugees. A 2016 study that more refugee and immigrant women had their first obstetric visit after 12 weeks of gestation than U.S.-born women, despite

the availability of health insurance (Kentoffio, Berkowitz, Atlas, Oo, & Percac-Lima, 2016). Refugees also reported fewer antenatal visits than U.S. born women (Kentoffio et al., 2016). Prenatal care is especially important for African refugees due to complicated health histories that may are may not be available for their health providers (Carolan, 2010). Additionally, cultural differences may affect how refugees engage with the U.S. health care system (Kentoffio et al., 2016).

Factors Affecting Prenatal Care Utilization in African Refugees

Migration factors. Studies evaluating the barriers and experience of refugee women seeking prenatal care provide information to improve how health care and social systems serve this population. In the UK, refugees and asylum-seeking women's lack of knowledge of sexual and reproductive health services contributed to delayed health assessments and pregnancy planning due to late initiation of prenatal care (Feldman, 2014). Somali women who viewed pregnancy as natural or normal did not understand why prenatal care was necessary and perceived it as a "burden" and not a "benefit" (Boerleider, Wiegers, Mannien, Francke, & Deville, 2013, Table 1 and p. 7). The authors state that this lack of knowledge of the health care system and the importance of prenatal care led to decreased utilization of maternity services (Boerleider et al., 2013).

Cultural factors. Adherence to cultural and religious beliefs can decrease utilization of prenatal care. Traditions with modesty and privacy can act as a barrier to accessing prenatal care. Often women hesitated to initiate care because they are ashamed to get undressed in front of strangers (Boerleider et al., 2013). Women report that exams are more comfortable if done by a female provider and women are more likely to participate in an exam if its necessity is sufficiently explained (Iliadi, 2008). Women also felt shameful and vulnerable during

gynecological exams, particularly women who had female genital circumcision (Berggren, Bergstrom, & Edberg, 2006). Women expected that their health care provider had knowledge of their cultural practices, and would panic if their provider did not know the procedures necessary to care for those who have undergone female genital circumcision (Berggren et al., 2006). Many African refugees are from male dominant societies and depend on their husbands for transportation and or interpretation; this has led to a delay or inconsistent prenatal care in refugees in western countries (Boerleider et al., 2013).

Treatment and communication factors. Pregnant women's feelings about how their health care provider perceived them, affected their engagement in their medical care (Sudbury & Robinson, 2016). When Somali women in Sweden felt that their caregivers were treating them poorly, they did not return for prenatal care with that provider (Boerleider et al., 2013). Women who spoke English felt patronized because health professionals made assumptions about their ability to communicate (McLeish, 2005).Women reported that non-verbal cues from the health provider lowered their self-esteem and ultimately led to decreased engagement and understanding about their pregnancy and child-birth (Briscoe & Lavender, 2009).

Women struggled to maintain their sense of autonomy and control through their pregnancy and birth. Women reported feeling that their doctors did not trust their judgment or their ability to make an informed decision (McCourt & Pearce, 2000). Migrant women of African origin felt that their decision to have a caesarean section or induction were coerced and without their complete informed consent (McLeish, 2005). This loss of control of their health decisions would lead to disengagement, loss of trust towards western medicine and reluctance to accept recommendations (Correa-Velez & Ryan, 2012). Factors such as perceived locus of

control, perceived health status, and fear accounted for 23% of inadequate prenatal care utilization in migrant women (Boerleider et al., 2015).

Socioeconomic and accessibility factors. Socioeconomic factors, such as finances, education, health insurance, employment status, and lack of child care can all act as a hindrance for accessing maternal care (Boerleider et al., 2013). Socioeconomic factors were considered responsible for 43% of inadequate prenatal care in first generation migrant women and 66% of inadequate care in second-generation migrant women in the Netherlands (Boerleider et al., 2015). Women who were employed reported lack of time or issues obtaining medical leave as factors that prevented them from attending prenatal visits (Boerleider et al., 2013).

Availability of interpretation services is a major concern and can be the difference between seeing a provider for a scheduled maternity visit or being sent home. Somali women in the UK reported that some providers refused to see them because they did not have an interpreter with them (Boerleider et al., 2013) . Migrant women prefer to receive information in their native language and work with providers who speak their native language (Boerleider et al., 2013). The interpreter system is not a perfect one; only 57% of health professionals in the UK reported feeling comfortable working with an interpreter (Sudbury & Robinson, 2016). If health care providers are not comfortable working in this system, this can affect the quality of the care they provide (Sudbury & Robinson, 2016).

Social and psychological factors. Refugee women have complex personal histories. Many of these women have experienced significant psychological trauma and have been separated from their families in their home counties (Boerleider et al., 2013). African refugees reported feeling lonely and isolated once resettled in the U.S. Some women are resettled with their children but not their husband, and have expressed anger and confusion about not having

their husbands in the U.S. (Wachter et al., 2016). Congolese women who resettled in the U.S. reported trauma including sexual assault, torture, death of loved ones, and birthing children conceived through rape. These women reported symptoms of anxiety and depression because of their experiences. They also report fear of dying and leaving their children alone because there is no else there to care for them (Wachter et al., 2016). Women with little support and who were isolated from their communities had difficulties accessing prenatal care due to lack of knowledge and or support (Boerleider et al., 2013).

Potential Solutions to Increase Prenatal Care Utilization

The Royal College of Obstetricians and Gynaecologists recommendations. In 2010, The Royal College of Obstetricians and Gynaecologists (RCOG) published *Pregnancy and Complex Social Factors* to provide guidance to stakeholders providing services and maternity care to women with social factors that may impact their prenatal care and the course of their pregnancy. Chapter five of this document is dedicated to women who are recent migrants, asylum seeker or refugees, and women who have difficulty reading or speaking English. This chapter explored five categories and determined that the following factors within organizations present challenges or offer improvements to prenatal care and pregnancy outcomes in this population:

- Access and barriers to pre-natal care
- Maintaining contact
- Additional consultation and support
- Additional information

RCOG then developed recommendations based on their findings to improve programs and services for this population. RCOG developed recommendations focused on service

organizations, training for health care staff, information and support for women, and communication with women who have difficulty reading or speaking. Table 2 provides a synopsis of the recommendation arranged by the factors they address (RCOG, 2010).

Table 2

Royal College of Obstetricians and Gynaecologists' Recommendations and Factors They Address

Migration Factors	Educate women on prenatal services and how to use them
	Offer information about access and the right to healthcare
	Encourage women to keep a handheld maternity record
	Use a variety of means to communicate with women in a variety of settings
Cultural Factors	Train staff on the social, religious and psychological needs of women in these groups
	Partner with community organizations that work with this group
Treatment and Communication Factors	Provide interpreters, link works, or advocate that is not a member of the woman's family or her partner
	Avoid making assumptions on a woman's culture, ethnic origin or religious beliefs
	Ask the woman about her understanding or to repeat what was said
Socioeconomic Factors	Offer flexible and increased time for prenatal appointments
	Monitor needs and plan and adjust services accordingly
	Partner with community organizations
	Train healthcare professionals on the most recent government policies on access and entitlement to care for this population
	Offer the women information on access and rights to healthcare
Social and Psychological Factors	Train healthcare professionals on specific needs of refugees, arising from female genital mutilation or HIV
	Monitor emergent needs and plan and adjust services accordingly

Mater Mother's Hospital refugee maternity service. Correa-Velez and Ryan's 2012 article "Developing a Best Practice Model of Refuge Maternity Care" explored what is necessary to provide the best prenatal care to refugees in Australia. Their study consisted of a literature

review, consultation with stakeholders, a chart review of African-born women, a survey of African-born women, and a survey of hospital staff. The results were used to develop a best practice model for an exclusive maternity refugee service at The Mater Mother's Hospital, a major maternity hospital in Brisbane, Australia. The model of care for the refugee service at the Mater Mother's Hospital focuses on the need for the following:

- Interpreting services
- Education for women about prenatal care
- Development for healthcare staff

The cornerstone of this model is a team-based approach with continuity of care by a female midwife or physician, social worker, and interpreters. Table 3 provides a synopsis of the recommendations (Correa-Velez & Ryan, 2012).

Table 3

Mater Mother's Hospital Best Practice Model and Factors they Address

Migration Factors	African community education workers to educate women and act as an advocate for the patient
Cultural Factors	Educated and train staff across the maternity service on traditional maternity practices
	Group session with the woman and her family to deliver culturally accepted care
	Option to have a female health provider
	Adopt a female circumcision policy for the hospital
Treatment and Communication Factors	Continuity of healthcare providers and team members
	Provide care tailored to the needs of the woman and their families
	Have group session with the woman and her family to develop culturally accepted care plan
	African community education workers to educate women and act as an advocate for the patient
Socioeconomic Factors	Social worker and interpreter as a part of the team
	Connect families with resources and services in the community
Social and Psychological Factors	Educate staff on the refugee experience and the effects of torture and trauma
	Social worker assistance with the psychosocial needs of the patient

The Role of Resettlement Agencies

Voluntary resettlement agencies are nonprofit organizations that sponsor refugees and organize and implement the resettlement process (Mott, 2010). Voluntary agencies play a key role in determining the resettlement location and connecting refugees to local health care, education and career services (Mott, 2010). These agencies organize community and volunteer support for refugee and help integrate refugees into society. In addition to integrating refuges into society, voluntary agencies also act as advocates and pillars of social change (Eby et al., 2011).

It is important that the resettlement agencies, policymakers and health care providers understand the challenges and beliefs surrounding maternity care that contribute to the experience of African-born refugee women in the U.S. (Dyer & Baksh, 2016). Understanding these challenges may improve birth outcomes, reduce complications and decrease the IMR in this population (Dyer & Baksh, 2016). Previous research about African-born refugee women's experience with maternity care is limited to European countries, Canada, and Australia. There are virtually no studies looking how refugees navigate maternity care in the U.S medical system and none that focus on local refugee women in Dayton and surrounding counties. Refugee resettlement agencies are essential partners for the refugee community. This study examines how the local refugee agency, Catholic Social Services, provides guidance and support for pregnant new arrivals and how these services minimize some of the challenges and obstacles that prevent pregnant refugees from accessing maternity care.

Methods

This study used a qualitative approach of interviews and text analysis of website content and focus group transcripts to gather information from Catholic Social Services about its

programs and outcomes. Catholic Social Services has partnered with the Wright State University Boonshoft School of Medicine's Department of Family Medicine and the Patient Centered Outcomes Research Institute (PCORI) to form a research team with other stakeholders in Dayton and surrounding cities. The purpose of the PCORI team is to evaluate health from the perspective of refugees. One of the areas that this team is evaluating is prenatal care for Congolese refugees in Dayton. They are in the early stages of investigating this topic, and recently had a focus group with a group of seven Congolese refugees who have been in the U.S. for less than one year. The purpose of the focus group was to explore the perception and experiences of Congolese refugees with maternity care in Dayton, Ohio. The transcripts of this focus group were used to determine how the local health care system can provide better maternity care and improve patient satisfaction and prenatal utilization of pregnant refugee women. The services provided by Catholic Social Services and their partners serve to address factors that affect refugee women accessing prenatal care.

Five factors affecting access to prenatal care in the refugee population were determined from the literature review. These factors are listed below, using descriptive phrases following Boerleider, Wiegers, Mannien, Francke, and Deville (2013):

- Migration factors: lack of knowledge of western medicine, healthcare systems, and reproductive health.
- Cultural factors: adherence to cultural norms and expectations
- Treatment and communication factors: perception of maltreatment, cultural insensitivity, misunderstandings

- Socioeconomic and accessibility factors: position in host country, financial instability, education level, lack of health insurance, lack of transportation, difficulties obtaining interpreting services
- Social and psychological factors: psychological trauma, undiagnosed mental health disorders, and social isolation.

The information gathered from Catholic Social Services Refugee Resettlement Agency was compared to recommendations published by the Royal College of Obstetricians and Gynaecologists (2010) and Maternity Refugee Services developed by Mater Mother's Hospital in Brisbane Australia (Correa-Velez & Ryan, 2012) based on the five factors listed above.

Results

Catholic Social Services Process for Pregnant African Refugees

Catholic Social Services (CSS) Refugee Resettlement Agency does not have a formal model or protocol for providing services to pregnant refugees. CSS provides standard services to all refugees for the first 90 days in the United States; additional services are provided based on individual circumstances. CSS relies on community partnerships, particularly the local public health department and health clinics, to provide comprehensive health services for refugees including pregnant women. Public Health - Dayton and Montgomery Country (PHDMC) perform all the initial health screenings of all refugees. Prior to arriving in the U.S. all women receive a pregnancy test; PHDMC will schedule the initial appointment with a primary care provider (PCP). When a woman is pregnant, the PCP will arrange for prenatal care. Public health also provides the PCP with the patient's medical and immunization records. The caseworkers at CSS enroll refugees in Medicaid and arrange for transportation to all appointments. Medicaid is

guaranteed to all refugees for as long as they qualify. Table 4 provides a synopsis of the services CSS provide arranged by the factors they address.

Table 4

Catholic Social Services Refugee Resettle Agency Services and Factors they Address

Migration Factors	Acculturation/orientation on healthcare in the United States
Cultural Factors	Acculturation/orientation on healthcare in the United States
	Caseworkers act as advocate for clients
	Patient Centered Outcomes Research Institute partnership with Wright State University Family Medicine Department and other local stakeholders
Treatment and Communication Factors	Patient Centered Outcomes Research Institute partnership with Wright State University Family Medicine Department and other local stakeholders
Socioeconomic and Accessibility Factors	Complete financial support guaranteed for the first 90 days
	Provide housing for the clients
	Responsible for obtaining employment for clients
	Enroll clients in medical insurance
	Enroll clients in ESL classes
	Provide transportation to all appointments
	Obtain childcare when necessary
Social and Psychological Factors	Partner with public health and health care providers
	Large Congolese refugee community in Dayton

Migration factors. During the first 90 days in the U.S., Catholic Social Services Refugee Resettlement Agency provides acculturation orientations to all refugees. As part of the orientation process, the refugees receive a crash course about healthcare in the United States. The course provides information about the different components of the healthcare system and how to appropriately use these components. During this course the refugees learn what is a hospital vs. a health clinic and when to go to the emergency department vs. when to go to a doctor's office. They also learn about their basic rights as a patient, such as the right to an interpreter, the right to care in the event of an emergency, and the right to non-discrimination. There is not a specific

orientation for pregnant women. The expectation is that pregnant women will receive education about prenatal care from their primary care physician or another healthcare provider.

Cultural factors. CSS works with refugees on an individual basis to address cultural factors and to help them adhere to their cultural norms. However, there are no formal services provided in this category. If a woman asks for a female provider, the caseworker at CSS can inform public health or the health clinic of their client's wishes. The acculturation/orientation process does provide some information about what to expect from a healthcare provider but this does not address cultural expectations or cultural norms. Addressing cultural concerns is then the responsibility of the healthcare providers. Partnering with the PCORI team can provide an opportunity to address these factors.

Treatment and communication factors. CSS currently does not provide any formal services that address treatment and communication factors. They have made themselves available, and have been willing to provide information to healthcare facilities and community partners if requested. Refugees are with the same caseworker at CSS and the caseworker may help mitigate any communication problems that may arise, however, this is on a case-by-case basis. Through the PCORI team, CSS is working to establish formal protocols to collaborate with partners and other stakeholders, which can serve useful for these factors.

Socioeconomic and accessibility factors. The bulk of the services provided by refugee resettlement agencies address the socioeconomic and accessibility factors. In the first 90 days, refugees are guaranteed support from CSS; CSS is completely responsible for refugees. The organization assists with obtaining housing, health insurance, enrollment into English classes, and employment or job training. CSS provides financial assistance through governmental funding, transportation to appointments, and helps organize childcare or enrollment in school

when needed. CSS also advocates for the right to interpreter services for their clients in health care settings.

Social and psychological factors. CSS will work with community partners and health care providers to obtain mental health services for refugees if it is recognized that the client need these services. These services are not provided to all refugees and it is determined on an individual basis. Refugees in the Dayton and Montgomery County area typically have family ties already in the area or they come to the U.S. as a family unit. There is a larger population of Congolese refugees, and this offers a social community. CSS often places refugees in communities with other individuals from their home country to help facilitate the transition and integration.

Comparison to Published Guidelines and Best Practice Model

Table 5 provides a comparison of CSS to the RCOG and the Mater Mother's Hospital.

Table 5

Comparison of Catholic Social Services to the Royal College of Obstetricians and Gynaecologists and Mater Mother's Hospital

Factors	Recommendations and Services	RCOG	MMH	CSS
Migration Factors	Education on prenatal care	**X**		**X**
	Handheld maternity record	**X**		
	Variety means of communication	**X**		
	Provide information about patient rights	**X**		**X**
	Africa community education worker/advocate		**X**	**X**

Table 5

Comparison of Catholic Social Services to the Royal College of Obstetricians and Gynaecologists and Mater Mother's Hospital (Cont'd)

Factors	Recommendations and Services	RCOG	MMH	CSS
Cultural Factors	Train healthcare staff about cultural practices	**X**	**X**	**X**
	Partner with community organizations that serves the refugee population	**X**		**X**
	Group/family visits		**X**	
	Female circumcision policy		**X**	
	Offer female provides		**X**	
Treatment and Communication Factors	Provide interpreters	**X**	**X**	**X**
	Avoid assumptions	**X**		
	Ask women to repeat information	**X**		
	Continuity of care team		**X**	**X**
	Tailor care to the women's needs		**X**	
	Group/family visits		**X**	
	African community education workers/advocates		**X**	**X**
Socioeconomic Factors	Flexible and increased time for appointments	**X**		
	Adjust plan to the needs of the woman	**X**		
	Partnerships with community organizations	**X**		**X**
	Educate staff on refugee rights	**X**		
	Provide information if patient rights	**X**		
	Social worker on the care team		**X**	**X**
	Connect women with resources		**X**	**X**
Social and Psychological Factors	Educate staff on the refugee experiences	**X**	**X**	
	Monitor needs of women and adjust plan	**X**		**X**
	Social workers avaible to assist with psychosocial needs		**X**	

Migration factors. Catholic Social Services does not provide direct services to address migration factors of accessing prenatal care. They do provide acculturation orientation to refugees that can serve as a valuable introduction into the American Healthcare System. However, they do not provide any education about what is prenatal care and why it's importance to mom and the baby. This education is left to the women's health care provider. The Royal College of Obstetricians and Gynaecologists and the Mater Mother's Hospital both suggest that more education to refugees about the importance of prenatal care is necessary to increase the utilization of prenatal services in this population. Collaboration between healthcare providers and refugee resettlement agencies can provide this vital information to expecting mothers and increase their utilization of these services. The Mater Mother's maternity refugee service hires African community education worker to educate refugees and help them navigate the health care system. This service provides a sense of security to have someone with a similar background help them through this process.

Cultural factors. RCOG and Mater Mother's Hospital Interventions that address cultural factors of accessing prenatal care is centered around education, primarily educating healthcare personnel about the culture of African refugees and implementing policies that ensure the cultural integrity of the women and their families. Caseworkers at CSS act as advocates for their clients concerning their cultural preferences; however, this is highly variable and dependent on the client expressing their desires. Partnering with stakeholders in the PCORI team provides an opportunity to explore how to disseminate information to health care providers and the health care systems in Dayton and Montgomery County. This has the potential to lead to systemic policies and recommendations similar to RCOG and Mater Mother's Hospital, that require training for all health personnel who provide prenatal care to refugee women.

Treatment and communication factors. Treatment and communication factors are mitigated by the development of trusting relationships. Mater's Mother Hospital model of continuity of provider, interpreter and social worker offers a solution to these factors. This model will allow for women to establish a relationship with everyone involved in her care. This can increase engagement and comfortability expressing concerns, which can ultimately increase understanding and compliance. The clients at CSS remain under the care of the same caseworker throughout their integration. Caseworkers are an excellent part of the refugee team and often are the first point of contact when there is a concern. As CSS develops relationships with stakeholders, the caseworker may be a vital component to the maternity team, to ensure that all needs of refugee women are met. The use of African community education workers can also help facilitate communication and increase comfortability.

Socioeconomic and accessibility factors. CSS is the prime community partner that provides socioeconomic support to the refugee community. The RCOG and Mater Mother's Hospital recognize the importance of partnering with organizations, such as resettlement agencies, to provide such support that is necessary to access prenatal services. CSS also provides services such as transportation and arrange for childcare. The caseworkers at CSS work with health care centers to ensure interpreter services are available, and can aid in completing forms and necessary documentation. These are essential services that significantly increase the ability of refugee women to access prenatal care.

Social and psychological factors. The RCOG guidelines and Mater Mother's Hospital model has neglected to provide adequate suggestions on how to address social and psychological factors for refugees. Although both reports agree that lack of social support and negative effects of psychological trauma can decreased prenatal care utilization. The suggestions include

educating the health care profession on the social and psychological factors that are unique to refugees, and forging partnerships that can provide services if needed. CSS provide similar services when there is concern for the mental health of a client. CSS primarily serve Congolese refugees; as of 3 years ago, 70% of all newly arriving refugees in Dayton are from the Democratic Republic of the Congo. This has allowed for a robust social network among Congolese refugees, and has allowed for refugees to turn to each other for advice and encouragement on various matters. As CSS continues to partner with stakeholders in the Dayton Community, they can develop a model to adequate serve refugees with mental health concerns.

Discussion

Providing services for pregnant refugees requires the collaboration of multiple organizations. There is no literature available that advises or guides refugee resettlement agencies in the U.S. on how to best serve this population. Resettlement agencies and the caseworkers that work closely with newly-arrived refugees often look for community support for clients on an individual basis. Catholic Social Services can utilize published models and guidelines to evaluate the services they provide to pregnant refugees and develop additional services or partnerships to improve how they serve these women.

Recommendations for Catholic Social Services

Migration factors. The partnerships through the Patient Centered Outcomes Research Institute (PCORI) teams offers an opportunity for Catholic Social Services (CSS) to develop methods of educating pregnant Congolese refugees about the necessity of prenatal care and what it is they can anticipate in a culturally sensitive manner. This is a low-cost option to increase utilization of maternity services by the refugee population. If budget permits, hiring African

community education workers/advocates to help refugee navigate the health care and social systems in Dayton, is a promising option to mitigate these factors.

Cultural factors. CSS partnering with stakeholders in the PCORI team who provide services and care to pregnant refugees provides an opportunity for CSS to disseminate vital information to healthcare providers and policy makers about the Congolese culture, beliefs and specific needs of this population.

Treatment and communication factors. CSS caseworkers are essential to the integration process of refugees into local systems and society. In addition to coordinating all the necessities for their clients, they also act as advocates and are a critical part of the support team. To alleviate the burden on caseworkers, hiring African community education workers can aid in reducing the treatment and communication factors that interfere with women accessing prenatal services.

Socioeconomic and accessibility factors. CSS excels at meeting these needs for their clients for they are essential to integration process. Strong partnerships with community organizations and educating refugees about services available to them will ensure success of women and their family once they are outside the care of CSS.

Social and psychological factors. Connecting newly-arrived pregnant women to the growing Congolese in Dayton and the Montgomery County can help facilitate these factors. As well as forging strong partnership with mental health practitioners, to prepare them to serve this population.

Challenges for Catholic Social Services

There are some challenges to implementing these changes to the services that CSS provide. The recent political climate in the country has decreased funding available to resettle

refugees. This has led to critical layoffs at CSS. For instance, CSS once had two Congolese refugees on staff as interpreters and to serve in many ways as an educator to Congolese clients; both were laid off due to recent funding cuts. Also, many of the factors that reduce women accessing prenatal care are due to the health system itself. While CSS can serve as a partner for the health systems, health insurance, and health clinics they cannot guarantee changes within these entities will be made. Serving pregnant refugees is a collaborative effort and for CSS to serve them best, strong partnerships must be forged. However, with recent financial cuts and limited staff, implementing additional services for pregnant refugees is a difficult task. In addition, service provided by CSS is only guaranteed for 90 days; if there are no other grants available to fund continued support pregnant women can find themselves navigating the system alone. This can have a negative impact on the health of mom and baby.

Despite these challenges, CSS is on track to providing better services for refugees in Dayton. The recent prenatal care focus group that CSS and the PCORI team organized, revealed that pregnant women are generally happy with the services they receive, especially compared to what they received in their previous country. There were some complaints associated with communication and language. Some women express fear associated with the lack of English-speaking abilities. One woman spoke about calling an ambulance and due to the language barriers, she was not able to answer the question they asked, and this delayed services. When this same woman was in labor, she delayed calling an ambulance due to fear associated with her previous experience. Another woman expressed being confused about the treatment she received for tuberculosis and if the medication she received cured her of the disease (Al-juboori, 2017).

Overall, the women seem motivated to take advantage of the heath care available to them and to prioritize prenatal care in the U.S. One pregnant woman who experienced two pregnancy

losses in the Democratic Republic of Congo, expressed confidence in the care that she is receiving with her current pregnancy, and believes that if she received this same level of care during her first two pregnancies her children would have survived. There was a consensus among most of the women, that their prenatal care practitioners communicated what to anticipate throughout their pregnancies. One woman appreciated that her caretakers told her everything about her pregnancy, and could discuss problems with the baby before delivery. Some women also expressed gratitude that their husbands were involved, something that is not the norm in their culture (Al-juboori, 2017).

Limitations of this Study

The lack of guidelines and models for refugee agencies providing services to pregnant women is a limitation to this study. The models used are more appropriate for healthcare and hospital systems and are not entirely applicable to CSS. In addition, there is a lack of research and recommendations from the United States, which has a specific resettlement process that is unique from those of United Kingdom and Australia. Another limitation is that CSS only guarantees services for the first 90 days in the U.S., although there are funding opportunities to extend services. This study therefore cannot provide insight into services provided to refugees outside the care of CSS. Additional research evaluating community partners and health clinic services to pregnant refugees will provide further insight into the needs of this population in Dayton and Montgomery County.

Conclusion

Dayton and Montgomery County have made improving birth outcomes and reducing infant mortality priorities for the community. As they tackle this public health issue, all members of the community must be included. African refugees may have worse birth outcome and higher

infant mortality rates than native-born women. Refugee women have also been shown to engage in prenatal care later than native women, and have fewer prenatal visits throughout their pregnancy. When determining how to provide comprehensive services to refugees to improve infant mortality and decrease the IMR in this population, their unique life course and cultural circumstances must be taken into considerations.

Catholic Social Services Refugee Resettlement Agency is responsible for refugees during the resettlement and integration process. The agency works very closely with refugees and its staff is the most knowledgeable about the needs of this population. While the resettlement agency adequately provides services that address the socioeconomic factors affecting access to prenatal care, and it provides some education to refugees that can address some of the migration factors, there are inadequate resources and services to address other factors that decrease utilization. This situation can be challenging with the current political climate, and decreased funding. However, Catholic Social Services is dedicated to forging strong community partnerships to address these factors, and to offering the most comprehensive services possible to pregnant refugees.

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Appendix A - List of Competencies Met in CE

Wright State Program Public Health Competencies Checklist

Assess and utilize quantitative and qualitative data.
Apply behavior theory and disease prevention models to develop community health promotion and intervention programs.
Describe how policies, systems, and environment affect the health of populations.
Communicate public health information to lay and/or professional audiences with linguistic and cultural sensitivity.
Address population diversity when developing policies, programs, and services.
Evaluate and interpret evidence, including strengths, limitations, and practical implications.
Explain public health as part of a larger inter-related system of organizations that influence the health of populations at local, national, and global levels.

Concentration Specific Competencies Checklist

Population Health Concentration
Explain a population health approach to improving health status
Use evidence-based problem solving in the context of a particular population health challenge.
Demonstrate application of an advanced qualitative or quantitative research methodology.
Demonstrate the ability to contextualize and integrate knowledge of a specific population health issue.
Evaluate population health programs or policies that are designed to improve the health of the population, reduce disparities, or increase equity.