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Community Health Workers for Building Trust with Low-Income Women from Racial/Ethnic Groups and At-Risk for Maternal Child Health Disparities

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Community Health Workers for Building Trust with Low-Income Women from
Racial/Ethnic Groups and At-Risk for Maternal Child Health Disparities

BY

ELBINA RAFIZADEH

DISSERTATION

Submitted in partial satisfaction of the requirements for the degree of

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in

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of the

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2021

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Copyright Page

Dedication

For my son, Omeed, who encouraged me to return to school. And now, five years later, I am preparing for graduation. Thank you for your patience with me as I weighed all the pros and cons of embarking on a third career, instead of settling into a routine of a second career in academic teaching. But instead, you encouraged me to apply to the Betty Irene Moore School of Nursing PhD program so I could gain the knowledge to continue what I was drawn- research. You not only are my friend, but a counselor with a listening ear, and my technical editor. I could not have completed this segment of my journey without you. Thank you.

For my mother, Tess Batala, who has been my role model of strength and resilience. Thank you for showing me what determination and success in the face of doubt looks like.

For my father, Michael Batala, who passed away in 2015. You have been a great advocate of education for everyone, in our own family and the community at large. You never forgot about the youth growing up in your beloved hometown barrio of Data, and you always strived to support them and give them the opportunities you never had. As a young immigrant from the Philippines, you earned your GDE then became an Army drill sergeant for the American Armed Forces. After an early retirement, you broadened your knowledge by becoming adept at the computer while in your seventies, which led to learning about investments-your third career until you passed at the age of eighty-nine. Thank you, Dad, for showing me that anything else is possible with hard work, determination, and motivation.

And finally, for Nader, who passed in 1984. I know you are smiling from somewhere. As an immigrant from Iran who embraced America, then married another immigrant, your college mate originally from the Philippines. Your sudden passing and fond memories continue to motivate me to continue my work for social justice and health equity. Thank you.

framework is invaluable. I am most grateful to you for stepping in to serve as my fourth committee member.

I also acknowledge Dr. Phillip Goldin and Dr. Kupiri Ackerman-Barger, both who participated in my qualifying exam. Dr. Goldin, your guidance and advice has helped in the timely organization of the writing and timing of my qualifying exam. Dr. Kupiri Ackerman-Barger, our discussion about the health disparities among African American women in maternal mortality became the foundation of my research topic.

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Finally, this study was not possible without the participation of Community Health Workers located in California, Oregon, Texas, Illinois, Maine, New York, Massachusetts, and

South Carolina. You worked in these organizations that agreed to be recognized are the American Public Health Association, Community Health Worker Section, San Diego Promotores Coalition, West Fresno Community Health Center, Hayward Tiburcio Vasquez Community Health Clinic, San Antonio Public Health: Healthy Neighborhoods, Community Medical Centers, Inc., Northwest Regional Primary Care Association, and the Clear Language Group. Your enthusiasm and interest helped to motivate me in times of dissuasion. Thank you for your commitment to help your clients overcome their barriers of health care access, including distrust in the health care system. Your work is so invaluable, and I feel honored to have had this opportunity to share your experiences through this study.

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Abstract

Background: The well-documented racial disparity in maternal-child health care delivery and outcomes exists between low-income racial/ethnic minority women and non-Hispanic White women. African American and African American Hispanic women are twice as likely to experience preterm births (PTB) and deliver low birth weight (LBW) infants than non-Hispanic White women. Native American women are 20% more likely to deliver PTB. Maternal mortality among African American women remains the highest at 2-3X in comparison to all racial groups. African American, Native American, and Hispanic women are 3X more likely to experience perceived discrimination than non-Hispanic White women. Chronic experiences of racism during pregnancy have been linked with PTB and LBW- one reason being that women may be reluctant to seek prenatal care. Public health programs address access to care barriers by employing community health workers (CHWs) because of their known success in building trust with at-risk, low-income communities. This study explores the CHW trust-building mechanisms that lower access to care barriers for a theoretical framework.

Method: The study uses a grounded theory method with interviews and focus groups of 32 CHWs.

Results: Building trust at the CHW-patient initial encounter requires: 1) recognizing social determinants of health (SDH) needs; 2) respectful communication; and 3) addressing time and environmental barriers. The theoretical framework includes the initial trust-building mechanisms- addressing SDH needs, embodying mannerisms, speaking appropriate to client's age, culture, and heath literacy, acknowledging patient fears through locus of control, and allowing for time flexibility.

Conclusion: Community health workers build trust requires understanding the complex interplay

of a combination communication mechanisms

CHAPTER ONE

Introduction

Many community programs now include trained community health workers (CHWs), known globally for their front-line work with at-risk populations, including homeless and low-income women and families (Andrews, Felton, Wewers, & Heath, 2004; Friedman et al., 2006; Perry et al., 2017). CHWs have been part of community health programs in the United States since the early 1960s to address the growing need for health care in rural areas and more impoverished urban neighborhoods (Perry, Zulliger & Rogers, 2014). CHWs not only address barriers to care of accessibility because of the lack of available of local health care, but also barriers to care among racial/ethnic populations that distrust the healthcare system ((National Academies of Sciences, Engineering, and Medicine, 2017). As a result, health care organizations, both community and hospital-based programs that serve clients in the community, have employed CHWs into the workforce. CHWs are also described as trusted members of the community, thus have been implemental for the access of communities with a mistrust of the healthcare system (Catalani, Findley, Matos, & Rodriguez, 2009).

A UNICEF-sponsored review of over 700 articles and reports (552 from peer-reviewed journals) published from 1950-2015 examined global community-based strategies in MCH and infant health programs (Perry et al., 2017). One notable finding was that the inclusion of CHWs in collaborative community-based intervention strategies can help reduce risks of neonatal and perinatal morbidity (Perry et al., 2017). Community-based agents (including CHWs) were recommended to identify MCH health problems and refer patients for services and regular home visits for ongoing routine health follow-up (Perry et al., 2017). In MCH populations, CHW led

interventions are believed to promote trust in populations at risk for MCH disparities (Morton, 2012; Johnson & Gunn, 2015; Austad et al., 2017).

Despite this evidence for positive outcomes, the structural processes or mechanisms underlying the success of CHW interventions, including their communication strategies are unknown (Jack, Arabadjis, Sun, Sullivan, & Phillips, 2017; Katigbak, Van Devanter, Islam, & Trinh-Shevrin, 2015; Heisler et al., 2009). Respect and care, for example, are essential for building trust during interpersonal communication (Murray & McCrone, 2015), which facilitates access to care and adherence to treatment, but lacks description of how respect and care are conveyed during the interpersonal communication. Also, CHW with attributes such as racial/ethnic and language concordance are helpful to build trust (Street, O'Malley, Cooper, & Haidet, 2008). However, CHWs must also show their effectiveness based on their experience and knowledgeable before they are accepted in the community, indicating that racial/ethnic and language concordance do not guarantee that CHWs will be trusted (Grant et al., 2017; Saprii, Richards, Kokho, & Theobald, 2015). Further exploration of how CHWs foster trust with populations with a historical distrust of the healthcare system, has implications for low-income women from racial/ethnic back grounds and at higher risk for MCH disparities.

Statement of the Problem

Racial and ethnic disparities in maternal-child health (MCH) care delivery and outcomes are well documented (Wheeler & Bryant, 2017). When compared to non-Hispanic White women, African American women, followed by Native American women and Hispanic women are more likely to have inadequate prenatal care-measured by later entry and a total number of visits (Kentoffio et al., 2016; Gadson, Akpovi, & Mehta, 2017; Parekh, Jarlenski, & Kelley, 2018). Inadequate prenatal care is associated with adverse infant birth outcomes such as preterm

birth (PTB), small for gestational age (SGA), or low birth weight (LBW), even when accounting

for the fewer number of prenatal visits associated with shortened pregnancies in PTB (Lu,

Kotelchuck, Hogan, Johnson, & Reyes, 2010; Gadson, Akpovi, & Mehta, 2017). For instance,

African American and African American Hispanics are 1.5 to 2 times more likely to experience

preterm births (McLemore et al., 2018; Raglan, Lannon, Jones, & Schulkin, 2016; Hamilton,

Martin, Osterman, Curtin, Matthews, 2015) and Native American women have a 20% higher

likelihood experiencing preterm births (March of Dimes, 2018) in comparison to non-Hispanic

White women. The 2013 Vital Statistics Natality Files report Hispanic women have a slightly

higher prevalence for preterm birth in comparison to non-Hispanic White women (predicted

probabilities 7.0%, 95% CI 6.89, 7.02 versus 6.19%, 95% CI 6.15, 6.24) (Bediako et al., 2015).

African American and Asian women are 2 to 3 times as likely to deliver a LBW

compared to non-Hispanic White women (McLemore et al., 2018; Hamilton, Martin, Osterman,

Curtin, Matthews, 2015; Premkumar et al., 2016; Ro, Goldberg, & Kane, 2019). However,

Hispanic women have a slightly lower prevalence of LBW infants compared to non-Hispanic

White women with predicted probabilities at 4.2% and 4.7%, respectively (Bediako et al., 2015).

In contrast, analysis of data from the 2012-2014 U.S. Birth File, (Dennis, 2019) showed a higher

prevalence of high birth weight (HBW, weight >4000g) among American Indian women at

9.8%, higher than the national average of 8.2% (Dennis, 2019). In comparison to non-Hispanic

White women (6.8%), American Indian women also had higher prevalence of gestational

Diabetes (8.9%) (Dennis, 2019), which is known to contribute to HBW.

Rates of maternal mortality due to pregnancy-related complications are 2 to 3 times

higher among African American, Hispanic, and Native American women compared to non-

Hispanic White women (Petersen et al., 2019; Heck et al., 2020). Hispanic women are 3 times

more likely to die from pregnancy-related hypertension (Howell, 2018). Native American and African American women are two to three times as likely to die from eclampsia and preclampsia, causing postpartum hemorrhage (Howell, 2018). Wang et al's., (2020) review of eighty-three studies focusing of the social determinants of health and their impact on maternal mortality and morbidity found that low-income Hispanic and Native Indian women were the most likely to die from fatal cardiovascular complications from a hemorrhage related to preclampsia or eclampsia.

One proposed causal mechanism for racial disparities in PTB and LBW is higher levels of maternal stress due to the chronic experiences of racism and perceived discriminations, which in turn, may lead to elevated stress hormones with harmful effects on maternal and infant health as well as to reluctance to seek prenatal care (Armstrong et al., 2013; Gadson, Akpovi, & Mehta, 2017; Heck et al., 2020; Howell, 2018). More specifically, structural racism gives rise to historical mistrust that complicates patient perceptions (Wesson, & Cooper, 2019), with perceived discrimination becoming a barrier to health access and treatment adherence and increasing the likelihood for health disparities (Maria da Conceição, & Figueiredo, 2015; LaVeist, Isaac, & Williams, 2009). African American, Hispanic, and Native American women are three times as likely to experience perceived discrimination in comparison to non-Hispanic White women (Gadson, Akpovi, & Mehta, 2017; National Academies of Sciences, Engineering, and Medicine, 2017; Benza & Liamputtong, 2014; Pavlish, Noor, & Brandt, 2010; Novick, 2009; Feagin, & Bennefield, 2014).

Distrust of the health care system is highest among low-income racial and ethnic minority populations creating potential barriers to accessing necessary health care (National Academies of Sciences, Engineering, and Medicine, 2017; Novick, 2009; Tandon, Parillo, & Keefer, 2005).

The cause of this distrust has roots in institutional racism and personal experience most often affecting individuals who self-identify as Black and Hispanic (Ben, Cormack, Harris, & Paradise, 2017), although Native Americans, Asian Americans, immigrants, and other diverse populations also report similar experiences (Benkert, Peters, Clark, & Keves-Foster, 2006). Immigrant women who have migrated to developed countries report they lack support from and feel misunderstood by culturally insensitive providers (Winn, Hetherington, & Tough, 2017; Balaam et al., 2013). Importantly, when medical professionals discriminate against patients, those patients become less likely to seek health care in the future (Jacobs, Rolle, Ferrans, Whitaker, & Warnecke, 2006; Maria da Conceição, & Figueiredo, 2015).

Women with a history of perceived discrimination and depression are at risk for postpartum depression, particularly if they lack social support (Miller, 2002; Falah-Hassani, Shiri, Vigod, & Dennis, 2015; Liu & Tronick, 2013). Antenatal and postpartum depression, both examples of adverse perinatal outcomes, have significant consequences for mother and infant bonding (Jones, Letourneau, & Leger, 2019). Further, untreated depression can disrupt the continuity of care or delay required health follow-ups to identify developmental or physical maternal or infant abnormalities (Kendig et al., 2017). Early screening and early intervention are crucial to prevent the long-term impact of postpartum depression related to poor mother-infant interaction (Jones, Letourneau & Leger, 2019).

For CHWs, who have shown success in bridging the gap between communities and health care, as being trusted in their respective communities, there are no known studies explain how CHWs build trust with their communities, including low-income women from racial/ethnic backgrounds and at-risk for MCH disparities. Taking into account the studies that show how CHW experience, including their interactions with clients, is a predictor for building trust with

communities, the mechanisms that are lacking in these studies has implications for inquiry.

Purpose of the Study

This study addresses a critical gap in the literature related to how CHWs build trust during interpersonal communication with at-risk populations. The specific purpose is to identify the operational processes in CHW interpersonal communication that engender respect and care when establishing trust with low-income minority women who are at risk for MCH disparities and have a historical mistrust of the health care system. The study explores the CHWs' perceptions of their most effective communication strategies during health care encounters and how they convey respect and care. The study findings and theoretical concepts that emerge will help to inform community-based strategies for CHWs and other health care providers to address the problem of historical health system distrust working towards the overarching goal of a healthcare system that reduces the barriers to care and treats all patients equally (Office of Minority Health, 2013c, Molewyk Doornbos, Zandee, & DeGroot, 2014). The findings have implications that may lower the risk for MCH disparities by addressing the barrier to care, that is distrust in health care. When clients at risk for MCH disparities can trust the health care system, beginning with community health care workers, clients may gain access to the necessary care for both prevention or treatment.

CHAPTER TWO: Literature Review

Literature Review Introduction

This chapter provides a review of the literature divided into four sections. The first

section focuses on maternal-child health disparities under the following headings: a) disparities

in access to care barriers; b) disparities in pre-pregnancy care; c) disparities in prenatal care; and

d) disparities birth and maternal health outcomes. This first section highlights the implications of

poor maternal health outcomes that can occur as a result of inadequate or lack of health care.

Although the focus of the proposed study is Community Health Workers (CHWs), this section

provides important context as one of the primary motivations for the CHW's role in MCH

populations.

The second section defines health inequity and health inequality and discusses the roots

of distrust in healthcare in the context of institutional and individual barriers to health care

access. These issues are also key drivers of the CHW's role in MCH populations and again

provide important context. The historical significance of health care distrust is explored in this

section, beginning with a discussion of health inequity and health inequality.

The third section summarizes the literature on CHWs, and their general role and related

outcomes in MCH populations. This section also highlights studies of the role of trust in CHW

interventions.

The final section outlines conceptual frameworks of trust applied to healthcare by

Hupcey (2002) and Sheppard (2004)). This section also discusses interpersonal communication,

in the context of respect and care, as mechanisms of building trust. This dissertation study draws

on both conceptual frameworks to support the design, data collection, analysis, and the resulting

theoretical framework.

Maternal Child Health Disparities

Disparities in Access to Care

The social determinants of health play an important role in health behavior and health outcomes in maternal-child health populations (Wang, 2020). For example, having low income, lacking insurance, and being a woman of color increases the likelihood of having inadequate or no prenatal care, pre-term birth, and maternal morbidity and mortality, as well as numerous adverse maternal and infant health outcomes (National Institute of Environmental Health Sciences, 2019; World Health Organization (WHO), 2006; Anachebe & Sutton, 2003; Ciciolla, Armans, Addante, & Huffer, 2019; Leonard, Main, Scott, Profit, & Carmichael, 2019). These problems are compounded when women live in neighborhoods with scarce resources, including access to clinics that offer prevention care in maternal-child and reproductive health. These problems are only exacerbated by a lack of insurance or lack of transportation (Gadson, Akpovi, & Mehta, 2017). Further, experiences of perceived discrimination and racial bias that occurred in previous encounters with the health care system contribute to access to care barriers (Attanasio, & Kozhimannil, 2015; Sorkin, Ngo-Metzger, & De Alba, 2010; Hausmann, Kwoh, Hannon, & Ibrahim, 2013).

Cultural or social stigma related to mental health concerns is highest among Asian American and African American women, complicating their health-seeking behavior, affecting the diagnosis, referrals, and treatment (Lu, 2012; Office of the Surgeon General, 2001). Further, interpersonal communication barriers are created when women perceive that their providers did not listen to or understand them or include them in their health care decisions, leading to distrust of the health care provider (Ngo-Metzger, Legedza, & Phillips, 2004).

Women who are recent immigrants have reported discrimination as well, in incidents that have had a significant impact on their healthcare-seeking behavior, as they distrust a healthcare system that treats them with racial bias (Pavlish, Noor, & Brandt, 2010; Vu, Azmat, Radejko, & Padela, 2016). Qualitative studies of both immigrant women and their providers identify multiple barriers that prevent health care access or influence health-seeking behaviors, including miscommunication, lack of cultural understanding, and discrimination (Edward, & Hines-Martin, 2015; Sheppard, Zambrana, & O'malley, 2004; Attanasio, & Kozhimannil, 2015). Immigrant women who are traditional Muslims have further challenges and will delay seeking healthcare if they are unable to find a female clinician (Vu, Azmat, Radejko, & Padela, 2016).

Disparities in Pre-pregnancy Care

Health disparities are well-documented in pre-pregnancy care, including reproductive health care, family planning, and education to promote health behaviors (e.g., diet, physical activity, smoking, and substance abuse) that reduce prenatal risk (National Institute of Child and Human Development, 2017). Pre-pregnancy care includes preventive measures to avoid unintended pregnancies (defined as unplanned or unwanted pregnancies) (Reproductive Health, 2019). Half of all pregnancies in the United States are unintended, with most occurring among women from racial/ethnic minority groups (Dunlop, Logue, Miranda, & Narayan, 2010; Kim, Dagher, & Chen, 2016). Groups that experience socio-economic disparities, including higher rates of unfinished high school, are at a higher risk for unintended pregnancies in adolescence National Institute of Child and Human Development, 2017). A secondary analysis of the National Survey of Family Growth from 2006-2010 showed that young non-Hispanic adolescents with less than a high school education had the highest risk for unintended pregnancy (Kim, Dagher, & Chen, 2016; Robbins et al., 2018). A recent study of pregnant women found the

highest occurring risk behaviors occurred among non-Hispanic black women and those who were uninsured or lived in the southern states of the U.S. (Robbins et al., 2018). Robbins' (2018) study also showed that the rates of postpartum contraceptives use were lowest among women ages 35-44 years; rates of smoking were highest among uninsured women; and rates of prenatal vitamin use and physical activity were lowest among non-Hispanic Black women (Robbins et al., 2018). A 2014 cross-sectional study of 1,023,586 hospital birth admissions of adolescents ages 13-18 years old found that black, Hispanic, and Asian American adolescents had higher odds of obesity, smoking, alcohol, and substance abuse when compared to their non-Hispanic White adolescent counterparts (Abdelaal, Mohamed, & Aly, 2018). The risk for adolescents is compounded as they confront multiple challenges, including social and cultural pressures from their peers, school, and family; moreover, they may not fully understand the necessity of prenatal care (Somers & Surmann, 2005). Taken together, these findings underscore the importance of interventions to promote pre-pregnancy care and reduce related disparities.

Disparities in Prenatal Care

Access to prenatal care depends on multiple factors, including barriers linked to distrust in health care and the social determinants of health, such as available transportation, insurance, or distance to care (Gadson, Akpovi, & Mehta, 2017). These barriers can lead to delays in seeking prenatal care. For example, Hispanic women are more likely to delay prenatal care until the third trimester (Bryant, 2009; Gadson, 2017), which has implications for maternal and infant health outcomes given that this group has the highest prevalence of gestational diabetes (66%) of all racial/ethnic groups (Yuen, Wong, & Simmons, 2018; Bardenheier et al., 2015). Asian women also have a higher prevalence of pre-existing diabetes and gestational diabetes (GDM) when compared to non-Hispanic White women (10% compared to 5%), illustrating the

importance of prenatal care (Lawrence, Contreras, Chen, & Sacks, 2008). Unintended

pregnancies are also associated with a higher risk for inadequate or delayed prenatal care (Sable

et al., 1997), which may result in both poor maternal and infant outcomes (Shah et al., 2011).

Taken together, these findings underscore the importance of interventions to facilitate early

prenatal care to identify pregnancy complications among women who are predisposed to

multiple conditions (Betancourt, Corbett, & Bondaryk, 2014; Headen, Mujahid, Cohen, Rehkopf,

& Abrams, 2015; Siddiqui et al., 2017).

Disparities in prenatal care use are also evident among adolescents (ages 15-19 years)

who enter care later and have fewer prenatal visits than their adult counterparts (Maslowsky et

al., 2021). Although rates of adolescent pregnancy have declined to 18.8 per 1000 pregnancies in

2017 (Hamilton, Osterman, Drake, & Driscoll, 2018) from 34 per 1000 pregnancies in 2010

(Abdelaal, Mohamed, & Aly, 2018), they remain much higher young women of color,

particularly Native American (32.9/1000), Hispanic (28.9/1000) African American (27.5/1000)

and //Native Hawaiian or other Pacific Islander (25.5/1000) in comparison to non-Hispanic

White (13.2/1000) and Asian adolescents (3.3/1000) (Hamilton, Osterman, Drake, & Driscoll,

2018).

Disparities in Birth and Maternal Outcomes

Pre-term birth

Pregnancy complications increase the risk for pre-term birth (defined as birth before 37

weeks gestation (World Health Organization, 2021)), which in turn places the infant at risk for

complications, including low birth weight (LBW; i.e., infant birth weight <2500 grams),

respiratory problems, neurologic disability, and mortality (Cutland et al., 2017). Women from

non-White racial minority groups with low-income experience the highest rates of pre-term birth,

compared to U.S. non-Hispanic White women and women in other high-income countries (Schaaf, Liem, Mol, Abu-Hanna, & Ravelli, 2013). In the U.S., infants born to African American and African American Hispanic women are more than 1.5 to 2 times more likely to be born pre-term in comparison to non-Hispanic White infants (Bediako, BeLue, & Hillemeier, 2015; Raglan, Lannon, Jones, & Schulkin, 2016; Schaar, Liem, Mol, Abu-Hanna, & Ravelli, 2013; Gavin, Grote, Conner, & Fentress, 2018). Native American women are 20% more likely to deliver pre-term (March of Dimes, 2018).

Maternal co-morbidities, such as gestational diabetes, hypertension, and other cardiovascular conditions, can increase the risk for pre-term birth, particularly if women have inadequate prenatal care (Gadson, Akpovi, & Mehta, 2017). For instance, women with chronic hypertension are 2 to 3 times more likely to experience pre-term birth, and African American and Asian/Pacific Islander women with chronic hypertension are 3.5 times more likely to give birth prematurely (Premkumar et al., 2016).

Chronic experiences of racism may trigger mental stress in pregnant women, resulting in physical responses, such as elevated urinary cortisol and subsequent elevated systemic blood pressure. Over time, women may have an increased risk of adverse outcomes, especially among those who have severe health conditions such as obesity, diabetes, and cardiac disease (Hunte & Williams, 2009; Hall et al., 2015; Leitner, Hehman, Ayduk, & Mendoza-Denton, 2016). Elevated blood pressure is also a typical negative physiological response to experiencing racism and is also one of the most frequently occurring pregnancy-related complications associated with pre-term births (Shen, Tymkow, & MacMullen, 2005).

A cross-sectional survey of singleton births (2011-2014) in California showed a stronger association between chronic worry about racism and pre-term birth among African American

women than non-Hispanic White women even after accounting for sociodemographic, behavioral, and medical co-variates (Braveman et al., 2017). African American, Native Indian, and Hispanic mothers experience three times the race-related stress in comparison to non-Hispanic White women (Gadson, Akpovi, & Mehta, 2017; Orchard & Price, 2017; Mutambudzi, Meyer, Reisine, & Warren, 2017; Raglan, Lannon, Jones, & Schulkin, 2016). African American and Native Indian women are also more likely to experience psychosocial stressors due to frequent experiences of racial discrimination, regardless of neighborhood advantage or income status (Farmer & Ferraro, 2005; Stancil, Hertz-Piccoto, Schramm, & Watt-Morse, 2000). In addition to increasing the risk for pre-term birth, these stressors increase the risk of other adverse birth outcomes (Farmer & Ferraro, 2005; Stancil, Hertz-Picciotto, Schramm, & Watt-Morse, 2000).

Low Birth Weight, Small for Gestational Age, High Birth Weight

From 2005 until 2014, the prevalence of LBW decreased from 6.9% to 6.7% (Ratnasiri, 2018). Since 2014, the overall risk for LBW in the U.S. further decreased from 6.5 to 6.2% (CDC, 2020). However, within specific sub-groups, rates of LBW have increased, including African American (from 10.5% to 11.4%) and Hispanic infants (from 5.8 to 6.9%). The rates for non-Hispanic White infants remained the same (5.1% to 5.1%) (CDC, 2020).

A cross-sectional study of live births in New Jersey from 1999-2014 showed that 9.6% of African American and 5.3% of Hispanic women delivered LBW compared to 3.9% of non-Hispanic White women (Ro, Goldbert, & Kane, 2019). A study of 9,740 women from eight clinical sites across the United States found that the odds for delivering an infant considered small for gestational age (SGA-defined as having lower than normal at gestation age at birth) was the highest among non-Hispanic Black women and Asian women followed by Hispanic

women (ORs= 2.2, 2.1, and 1.4, respectively) in comparison to non-Hispanic White women (Grobman et al., 2015).

The prevalence of LBW among Native American infants is similar to non-Hispanic White infants; however, data from the 2012-2014 U.S. Birth File indicate a higher prevalence of high birth weight (HBW, weight >4000g; at 9.8% versus 8.2% on average)-which is often a sign of maternal diabetes with health effects on infants (Dennis, 2019). Relatedly, American Indian women also have higher rates of gestational diabetes in comparison to non-Hispanic Whites (8.9% versus 6.8%) (Dennis, 2019). In comparison, paradoxically, non-Hispanic Black and Hispanic women have the highest prevalence of gestational diabetes (10.5%, 12.1%, respectively), yet lower percentages of HBW infants (3%-7%) (Dennis, 2019).

Perineal Laceration

Perineal laceration, most likely to occur during intrapartum, vaginal delivery, occurs among 53-89% of all women (Ramar & Grimes, 2020). 3rd and 4th-degree perineal tears occur among 0.6-11% of women (Goh, Goh. & Ellapola, 2018). A severe complication of a perineal tear is hemorrhage (Goh, Goh, & Ellapola, 2018*)*, which can have fatal consequences. These hemorrhages are the 4th leading cause of pregnancy-related deaths accounting for 10.7% of all pregnancy-related mortality. During childbirth, Asian women also experienced higher rates of significant 3rd and 4th degree perineal laceration, (AOR) 1.36 (CI 95%; 1.32-1.40), in comparison to non-Hispanic White women (Bryant, Worjoloh, Caughey, & Washington, 2010).

Hemorrhage

Hispanic women have a lower ratio of pregnancy-related mortality (11.7 per 100,000 live births) in comparison to non-Hispanic White women (12.7 per 100,000 live births) (CDC, 2020). But Hispanic women also have higher pregnancy-related mortality rates due to hemorrhaging

from preeclampsia, eclampsia, and pregnancy-induced hypertension (Wang, 2020). Eclampsia and preeclampsia, if untreated, are often fatal due to the cardiovascular implications of severe hemorrhage (Wang, 2020).

Chalouhi et al. (2015) conducted a retrospective study of 1062 medical charts of women who suffered from postpartum hemorrhage (PPH). The study found that Native American women were more likely to have PPH in comparison to non-Hispanic White and Hispanic women (11.6% versus 7%) (Chalouhi et al., 2015). More recent findings from Siddiqui et al. (2017) showed that postpartum hemorrhage (PPH) might be even higher among Asian Americans compared to non-Hispanic White women (3.4% versus 2.7%), equating to a 1.7 times higher risk of death from PPH (Siddiqui et al., 2017).

Disparities in Perinatal Depression

Perinatal depression, which can occur during or after birth (National Institute of Mental Health, 2021), along with perinatal anxiety, are classified as psychiatric mood and anxiety disorders in women of reproductive age (American Psychiatric Association, 2013). Women also have a higher risk for post-partum depression (PPD) and perinatal depression if they lack social support, have marriage or relationship difficulties, problems of acculturation, or a history of depression or anxiety (Slomian, Honvo, Emonts, Reginster, & Bruyere, 2019; Rosenthal et al., 2015). Asian Indian mothers, for example, view PPD as a natural state, and will not seek help when they are at risk for social isolation, sometimes from their own family (O'Mahony, Donnelly, Bouchal, & Este, 2013). Immigrant women face additional challenges, including acculturation, language barriers, and a lack of control regarding decision-making, either in their family or their relationships-sometimes in situations including abuse (Falah-Hassani, Shiri, Vigod, & Dennis, 2015; Liu & Tronick, 2013). Although social support can be protective against

PPD, cultural and social stigma can make it very difficult to pursue mental health services (Fung & Dennis, 2010; O'Mahony, Donnelly, Bouchal, & Este, 2013).

Worldwide, among women of reproductive age, depression is the most common psychiatric disorder (Rahman, Surkan, Cayetano, Rwagatare, Dickson, 2013). First-time mothers are especially at risk for perinatal depression, including PPD, as they redefine their family roles and become new parents with little or no experience (Meleis & Trangenstein, 1994; Walsh, 2010). According to the Transitions Theory, experiencing transitions in life when one is unprepared for the situation can impact a person's emotional well-being (Meleis & Trangenstein, 1994; Kralik, Visentin, & Van Loon, 2006). This is especially true in the context of limited support or understanding within social and family relationships (Meleis & Trangenstein, 1994; Kralik, Visentin, & Van Loon, 2006).

One in every seven women experience perinatal depression, and 11.5% of new mothers experience perinatal depression (Kending et al., 2017; Freeman, 2019). Prenatal depression has a 6.5% to 12.5% chance of occurring in any one of the trimesters of pregnancy (Freeman, 2019; Gavin et al., 2005). Anxiety which often co-exists with depression (Hirschfield, 2001; Anxiety and Depression Association of America, 2021), occurs in 13-21% of women during the prenatal stage. And anxiety occurs in 11-17% of women during the postpartum stage (Kendig et al., 2017).

A review of 122 studies published between 2005 and 2014 found that women with PPD expressed sadness, dysphoria, and lower self-esteem (Slomian, Honvo, Emonts, Reginster, & Bruyere, 2019). Further, there is a vast difference in the global prevalence of PPD between developed nations (Slomian, Honvo, Emonts, Reginster, & Bruyere, 2019), with Germany having the lowest (1.9%) and the United States has the highest at (82.1%) (Slomian, Honvo,

Emonts, Reginster, & Bruyere, 2019). In the United States, 19.2% of women experienced minor postpartum depression within the first year of childbirth, while 7.1% of women developed major postpartum depression or postpartum psychosis (Fung, 2010).

Asian women (OR= 2.10, 95% CI 1.56, 2.83) and Black women (OR=2.08, 95%CI 1.71, 2.54) have twice the odds of developing perinatal depression, including PPD, compared to non-Hispanic White women (Grote, 2010; Belle & Doucet, 2003). Mexican American mothers experience significant early PPD (Gress-Smith, Luecken, Lemery-Chalfant, & Howe, 2012; Beck, Froman, & Bernal,2005). In Gress-Smith's (2012) study of 132 mother-infant pairs, of which 80% identified as Hispanic, rates of maternal depression were 33% and 38% at 5 and 9 months, respectively. Moreover, the infants of depressed mothers had significantly lower weight gain, more physical health concerns, and exhibited poor nighttime sleeping at nine months old (Gress-Smith, 2012).

Women from racial/ethnic minority backgrounds are more likely to be misdiagnosed by their doctors and given inadequate treatment when compared to their non-Hispanic White counterparts (Edge, 2010). There is also some evidence of a link between racial or ethnic discrimination and PPD (Grote, 2010; Belle & Ncube, Enquobahrie, & Gavin, 2017). Both maternal depression and anxiety are associated with experiences of racial discrimination, particularly among Black and Hispanic women, as well as recent immigrants to the U.S. (Liu, 2016; Rosenthal et al., 2015; Falah-Hassani, Shiri, Vigod, & Dennis, 2015; Maria da Conceição, & Figueiredo, 2015). Maternal depression and anxiety (including perinatal and postpartum depression) are associated with adverse outcomes (Kendig et al., 2017; Schetter & Tanner, 2012), including low birth weight and pre-term birth, and the likelihood for a poor maternal-infant attachment, affecting the infant's emotional well-being development (Bright & Becker,

2019; Grote, Bridge, Gavin, Melville, Iyengar, & Katon, 2010). Furthermore, women suffering from depression are less likely to adhere to treatment and self-care and more likely to develop problems with inadequate nutrition, loss of financial resources (inability to work), and potential substance abuse (Kendig et al., 2017; Schetter & Tanner, 2012).

Disparities in Pregnancy-Related Mortality

Since 1935, maternal mortality (i.e., pregnancy-related deaths) has improved significantly in the United States (Singh, 2010). However, since the late 1980s, the rates have increased among African American women, who, as noted, have the highest perinatal mortality deaths (41.7 deaths per 100,000 live births). They are also more likely to die from pregnancy complications when compared to their non-Hispanic White counterparts (Singh, 2010; MacDorman, Declercq, Cabral, & Morton, 2016). According to the CDC (2020), the five leading causes of pregnancy-related death from 2014-2017 were: other cardiovascular conditions (e.g., uncontrolled HTN) (15.5%), infection or sepsis (12.7%), cardiomyopathy (11.5%), hemorrhage (10.7%,) and thromboembolism (9.6%) (CDC, 2020; Division of Reproductive Health, 2019; Howell et al., 2018). American Indian women also have high pregnancy-related mortality rates at 28.3 deaths per 100,000 live births compared with their non-Hispanic White counterparts (MacDorman, Declercq, Cabral, & Morton, 2016; CDC, 2018). This is followed by 13.8 live deaths per 100,000 live births for Asian Pacific Islanders, 13.4 deaths per 100,000 live births for non-Hispanic Whites, and 11.6 deaths per 100,000 live births for Hispanic women (CDC, 2018).

The Role of Health Care Distrust in Health Equity

Health care distrust influences individual decisions about seeking or accepting health care. Thus, trust is an essential concept in consideration of disparities in access to care and birth

outcomes.

Definitions of Health Inequity and Inequality or Disparity

The earliest definitions of health inequity and health inequality (disparity) had origins in European studies of health differences between groups with higher income and lower income (Whitehead, 1991). The findings showed that people living in poverty suffered from a lack of access to quality health care (Whitehead, 1991). This resulted in higher rates of mental illness, dental problems, child mortality (children under six years old), and lower rates of live births (Whitehead, 1991). Young adults with low income were more likely to suffer from disabilities and chronic health conditions. Many worked as manual laborers, which contributed to higher adult mortality rates (Whitehead, 1991).

As a result of Whitehead's study, the World Health Organization (WHO, 1991) declared that health inequalities (disparities), or differences in the prevalence of disease between population groups, is distinguished from health inequity, which is the avoidable differences in health between groups as a result of social or racial injustice (Boston Public Health Commission, 2019; Arcaya, Arcaya, & Subramanian, 2015). Subsequent studies have further explored how health inequalities can occur due to age, gender, level of education, lack of employment, low-income status, lack of access to health care, and health system and provider bias (implicit or explicit) towards patients of diverse racial and ethnic backgrounds (Nesbitt & Palomarez, 2016, Braveman, 2014). In addition to disparities by income, race, and ethnicity, population disparities also occur by age, gender, mental health, or religion (Braveman, 2014; National Academies of Science, Engineering, and Medicine, 2017; Purnell et al., 2016). By fully understanding the implication of health inequity, health care systems can further examine how to reduce inequities through research and program development.

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The concept of health inequality emerged in the first study of social and economic influences on tuberculosis mortality differences between Blacks and Whites, conducted by Du Bois & Eaton in 1899 (White, 2011). Du Bois' examined the neighborhood and living conditions of 2500 households, finding that Blacks who lived in slum districts had a higher mortality rate than Whites living in higher-income districts. The outliers were three black families who lived in a higher-income neighborhood (Du Bois & Eaton, 1899; White, 2011). This early finding is the first in establishing health disparity due to income. Du Bois' findings extend to other groups, such as the Irish, who were also a disadvantaged racial/ethnic group. This immigrant community experienced a higher prevalence of consumption due to similar living conditions in the slums (White, 2011). This study identified the need for more data on the connections between health, race, and socioeconomic status. As a result, subsequent studies were conducted to determine the social determinants of health, i.e., environmental circumstances that impact people's quality of life, including education, employment, income, access to health care, housing, neighborhood, environmental safety, social environment, accessibility of transportation, and availability of resources (Baciu, Negussie, Geller, Weinstein, & National Academies of Sciences, Engineering, and Medicine, 2017).

Structural racism, also known as institutional or systemic, racism is one significant barrier to health care among low-income racial and ethnic groups. A discussion of structural racism must begin with the definition of racism: "an oppressive system of racial relations, justified by ideology, in which one racial group benefits from dominating another and defines itself and others through this domination" (Gee, 2002). Racism involves harmful and degrading beliefs and actions expressed and implemented by both institutions and individuals" (Gee, 2002). Structural racism involves the participation of institutions that reinforce policies, programs, rules,

and regulations that can negatively influence outcomes in health care, education, employment, housing, credit, media coverage, as well as other domains (Bailey et al., 2017).

Structural racism breeds inequality in almost every aspect of life, which has real consequences for the health outcomes of marginalized people. Poor living conditions and harmful social environments (e.g., high crime neighborhoods, regular exposure to racial aggression) can lead to a host of elevated health risks (Bailey et al., 2017). People living in these circumstances experience higher pregnancy complications and infants with low birth weight, diseases, and chronic conditions, such as asthma (Bailey et al., 2017; Gee & Ford, 2011). Those living under systemic residential segregation suffer more environmental stress factors while lacking sufficient community mental health or physical health facilities (Bailey et al., 2017; Loignon et al., 2015). These factors are combined with a lack of even basic resources, such as transportation (e.g., less frequent bus schedules), as those living in urban and rural areas are often geographically isolated from health services (Bailey et al., 2017; Loignon et al., 2015).

The American Public Health Association (APHA), in 2001, addressed the racial disparity in health care, stating that race is a social construct that classifies individuals in a "race-conscious" society. The organization affirmed that racial disparities had been built into the foundations of our health care system, resulting in systemic inequality that has hurt communities of color and immigrant populations (APHA, 2001). Similarly, HealthyPeople 2020, the nation's health plan, emphasizes that focused and ongoing societal efforts are required to address avoidable inequalities, historical and contemporary injustices, and eliminate health and health care disparities (HealthyPeople.gov, 2012).

Health inequality and inequity have roots in structural or institutional racism. Unlike the direct aggression that is generally associated with the concept of racism, structural racism has

contributed to health inequities because of policies that do not favor people of color, particularly those with disadvantages secondary to income, as evidenced by the unequal distribution of health care access, education opportunities, or residential segregation, and the resulting exposure to environmental risks (Bailey et al., 2017; Braveman, 2014). Not surprisingly, distrust of the health care system occurs most frequently among people of color.

Institutional Barriers to Care

Healthcare professionals may contribute to structural racism as they direct stereotype threats during patient encounters (Aronson, Burgess, Phelan, & Juarez, 2013). Stereotype threats can cause patients to experience anxiety, negative physiological response, and changes in memory (Burgess, Warren, Phelan, Dovidio, & Van Ryn, 2010). Health professionals, in general, are educated to treat all patients equally, regardless of race, sexual orientation, age, appearance, or gender. Yet, studies have reported discrimination experienced by patients in their encounters with providers (Shavers et al., 2012; Armstrong et al., 2013; Kaplan, Calman, Golub, Davis, Ruddock, & Billings, 2006; Horner-Johnson, Fugiura, & Goode, 2014; Hausmann et al., 2013). Experiences of discrimination are demonstrated in a systematic review of 42 articles, of which 27 showed associations between implicit racial and ethnic bias and lower quality of healthcare, and 10 showed a similar association with age, gender, and weight biases (FitzGerald & Hurst, 2017). Another review of 37 studies conducted between 2015 through 2016 found that 31 of the studies showed evidence of implicit bias among health care providers directed towards African Americans with dark complexion (versus light complexion), as well as Hispanics and, Native American with a darker complexion (Maina, Belton, Ginzberg, Singh, & Johnson, 2018). In the same review, eight studies found no statistically significant association between implicit bias and adverse healthcare outcomes. However, six studies showed that implicit bias was associated with

disparities in treatment and follow-through, the establishment of therapeutic bonds, pain management, and the presence of empathy (Maina, Belton, Ginzberg, Singh, & Johnson, 2018). Despite the mixed results, the findings call for further investigation of the contextual differences in the studies that may have influenced the results, including the availability of provider cultural training or the percentage of patient-provider racial/ethnic concordance. These findings are supported by the Institute of Medicine report that details how patients from non-White racial/ethnic minority groups are less likely to receive necessary treatments and are more likely to receive less useful procedures (2003). As a result, individuals from low-income and non-White racial/ethnic groups are at higher risk for adverse health consequences (Murray & McCrone; Thom, Hall, & Pawlson, 2004; Sheppard, Zambrana, & O'Malley, 2004; Wheeler &Bryant, 2017).

A study by Gee & Ford (2011) suggests that provider bias may be addressed by the inclusion of more people of color in the health professions (Gee & Ford, 2011). For example, a cohort study of 252 African American adults (Cooper et al., 2003) who received care either from a White physician or a Black physician concluded that patients reported higher patient satisfaction with the black physician. A more recent cohort study of 147,015 physicians (combined family practitioners, internists, primary care physicians, and pediatricians) found that providers do not reflect the racial/ethnic composition of the general population with less than 16% Asian American, less than 8%, Black, 7% Hispanic, less than 1% Native American, and 68-76% White (Xierali, & Nivet, 2018).

Provider communication skills and cultural knowledge of diverse racial/ethnic backgrounds are essential for a successful provider and patient encounter (National Academies of Science, Engineering, and Medicine, 2017; Wheeler & Bryant, 2017). The growth of

America's diverse population means it is increasingly important for medical professionals to possess intercultural fluency and sensitivity when interacting with patients from different cultural backgrounds. Inadequate communication between the health provider and patient can have disastrous consequences, including the exacerbation of the patient's condition, insufficient understanding of proposed treatments, reluctance to seek preventive care, and the possibility of subsequent death due to delays in the continuity of care (National Academics of Science, Engineering, and Medicine, 2017; Sheppard, Zambrana, & O'Malley, 2004).

Individual Barriers to Health Care

Health-seeking behavior depends on individual beliefs about health care, ability or willingness to access care, and the severity of illness (Andersen & Newman, 2005). There are linguistic barriers to contend with and inherent difficulties in navigating the healthcare system's complexities. And all of this is compounded by an individual's previous experiences of discrimination (Ngo-Metzger et al., 2003; Rocque & Leanza, 2015).

Individual preferences related to healthcare play a vital role in health-seeking behavior. For example, women who prefer natural births may choose complementary alternative methods (CAM) for treatment (Steel et al., 2014). Cultural norms may also shape individual preferences; for instance, in cultures that perceive mental illness as shameful, stigma creates barriers to mental health care (O'Mahony, Donnelly, Bouchal, & Este, 2013).

Systemic racism can lead to personal experiences of discrimination, stereotyping, and racial bias also contributes to distrust of the healthcare system and can perpetuate delays or avoidance in seeking care (Jacobs, Rolle, Ferrans, Whitaker, & Warnecke, 2006; Maria da Conceição, & Figueiredo, 2015; LaVeist, Isaac, & Williams,2009). Personal experiences of racial bias and discrimination increase the likelihood that an individual will avoid seeking care in

the future, and this can have severe health consequences for low-income women with MCH needs (Jacobs, Rolle, Ferrans, Whitaker, & Warnecke, 2006; George, Duran, Norris, 2014; Sheppard, Zambrana, & O'Malley, 2004). For example, increased anti-Arab sentiment after the 9/11 attacks was associated with a corresponding increase in low birth weight and pre-term births among Arab American women (Lauderdale, 2006).

A review of studies of perinatal and maternal outcomes in high-income countries, including the United States, found that certain life circumstances led to increased risk for adverse perinatal outcomes. This includes low income, lack of education, being a migrant, and living in neighborhoods that are perceived unsafe (de Graaf, Steegers, & Bonsel, 2013), compounding the barrier of distrust in healthcare because of previous experiences of racism. African Americans experiencing the psychological stress of racism during pregnancy are at higher risk for complications, including the five leading causes of maternal mortality in the United States: cardiomyopathy, preeclampsia, thromboembolism, hemorrhage, and infection (Louis, 2015; Division of Reproductive Health, 2019; Howell et al., 2018; Betancourt, Corbett, & Bondaryk, 2014; Shen, Tymkow, & MacMullen, 2005).

Women from low-income and non-White racial/ethnic groups who need interpreters may delay seeking prenatal care due to language barriers, and this may increase their risk of developing prenatal complications and delivering pre-term babies (Shaffer, 2002, Lauderdale, Wen, Jacobs, & Kandula, 2006). The provider's technical competence, along with their willingness to build partnerships with the client by utilizing interpersonal communication skills, and expressions of respect and caring, all leave an impact on the patient experience (Thom & Campbell, 1997; Doescher, Saver, Franks, & Fiscella, 2000; Rocque, & Leanza, 2015). When medical professionals discriminate against clients or treat them with disrespect, those patients

may be less likely to seek medical help (Rocque & Leanza, 2015; LaVeist, Isaac, & Williams, 2009).

Community Health Workers

Community health workers are important frontline members of the community health team, as they provide primary prevention and promotion services (Catalani, Findley, Matos, & Rodriguez, 2009) and help address health system distrust by bridging gaps in access to care. As trusted members of their communities (Catalani, Findley, Matos, & Rodriguez, 2009), CHWs successfully promote access to health care and health education (WHO, 2018) within maternal child health populations (Perry et al., 2017).

CHWs are a crucial community-based strategy for research and programs that effectively address structural and cultural barriers in health care, as recommended by the American College of Obstetricians and Gynecologists Committee (Wheeler & Bryant, 2017). Significantly, CHWs are based in the community, thus extending programs for improving access to health care that focused primarily on acute care settings (Bourgois, Holmes, Sue, & Quesada, 20107). This is critically important because many low-income patients, regardless of race or ethnicity, are first seen in community health clinics or, in the emergency room (Bourgois, Holmes, Sue, & Quesada, 2017), often due to a lack of health care insurance for basic primary care (Berkowitz et al., 2016). As a result, CHWs are a key component of community-based strategies designed to improve health care access among low-income populations, including minority groups (Perry et al., 2017).

The origin of CHWs can be traced back to China in the 1920s when lay workers were trained to become "barefoot doctors" serving rural areas where there was a lack of access to healthcare. (Perry, Zulliger, & Rogers, 2014). These "barefoot doctors" would provide

immunizations, record births and deaths, administer basic first aid, and educate their

communities about the importance of hygiene and clean public water supplies (Perry, Zulliger, &

Rogers, 2014). Globally, the barefoot doctors influenced the adoption and expansion of the CHW

role in other developing countries, where there was also lack of medical personnel to meet all the

health care needs, particularly among the rural areas of India, Bangladesh, Southeast Asia, and

Africa (Perry, Zulliger, & Rogers, 2014).

By the 1960s, the CHW care model was implemented in the United States to address the

growing need for health care in rural areas and more impoverished urban neighborhoods (Perry,

Zulliger & Rogers, 2014). In 1965, the U.S. enacted the historic health care legislation of

Medicare and Medicaid, which was instrumental in desegregating hospitals across the country

(Stevens, 2008). These healthcare bills finally granted diverse racial and ethnic groups access to

healthcare they had been historically denied (Stevens, 2008). As the population grew more

diverse in the 1970s, health care systems, including public health programs, recruited CHWs

from diverse communities, including Promotores to work with Hispanic populations and trained

them to facilitate access to primary health care (MHP Salud, 2014).

CHWs are often the missing link between the healthcare system and low-income minority

communities (Murayama, Spencer, Sinco, Palmisano, & Kieffer, 2017). Through their

understanding and experience from cultural backgrounds, CHWs understand cultural humility

and can effectively communicate with disenfranchised populations (Catalani, Findley, Matos, &

Rodriguez, 2009) that the healthcare industry has historically mistreated. This has proven

especially important as these communities are at higher risk for chronic disease and are often

underserved in maternal health care (Murayama, Spencer, Sinco, Palmisano, & Kieffer, 2017;

Perry, Zulliger & Rogers, 2014). CHWs have also been beneficial in assisting with health

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promotion and health behavior strategies as members of community health teams managing asthma and diabetes (Parker et al., 2008; Krieger, Takaro, Song, 2005; Spencer et al., 2011).

Today, there are an estimated 85,000-200,000 CHWs in the U.S working in various capacities in community clinics, public health programs, or non-profit organizations (Ingram et al., 2012). Their educational backgrounds range from volunteers with on-the-job training to community college graduates with formal certification (Ingram et al., 2012). Certified CHWs can apply for paid positions offered through public health and non-profit programs. Tasks performed by CHWs include outreach, providing resources for health care access, screening, and teaching basic health education (Ingram et al., 2012; Islam, Zanowiak, Riley, Nadkarni, Kwon, & Trinh-Shevrin, 2015). As trusted members of diverse communities, CHWs are frontline workers and often the first to see patients. They provide outreach, and help their community members navigate through health care systems, including Medicaid (Witmer Seifer, Finocchio, Leslie, & O'Neil, 1995; Rosenthal et al., 2010; Mobula et al., 2015; Olaniran, Smith, Unkels, Bar-Zeev, & van den Broek, 2017; McKenney, Martinez, & Yee, 2018). Further research is needed to understand how CHWs convey respect in their communication and build the trust necessary for successful health interventions.

A review by Gibbons & Tyrus (2007) of 12 randomized controlled trials conducted from 1990 to 2007 showed the positive impact that CHWs have on their communities throughout the U.S. Ten of the 12 studies reported improved rates of PAP smear test screening (Engelstad et al., 2005), reduced rates of breast cancer (West et al., 2004), decreased rates of blood pressure (Levine et al., 2003), and improvements of nutritional eating habits (Elder et al., 2005). Among minority communities, including Black and Hispanic residents, CHWs helped prevent the exacerbation of chronic conditions such as diabetes, cardiac disease, and asthma (Carrasquillo,

Patberg, Alonzo, Li, & Kenya,2014; Babamoto et al., 2009; Levine et al., 2003; Murayama, Spencer, Sinco, Palmisano, & Kieffer, 2017; Apter et al., 2018). The benefits of CHW interventions in preventive care in MCH, reproductive care, and management of chronic conditions in minority communities emphasize their essential role in community programs.

A more recent review of 36 studies, including 12 randomized controlled trials (RCTs) (Jack, Arabadjis, Sun, Sullivan, & Phillips 2017), examined how CHW interventions reduced medical expenses for patients with chronic conditions. The review focused on patients from minority groups with at least one chronic disease, such as diabetes, asthma, or HIV. The findings from the RCTs showed significant reductions in urgent care in two of four trials, emergency department visits in three of eight trials, and hospitalizations in one of seven trials. One study showed that CHWs lowered emergency room visits by working with clients to access necessary timely care (Johnson et al., 2012). Another study showed the cost-effectiveness measured by Quality Life Adjusted Life Years gained through the CHW interventions with Hispanics diagnosed with Type 2 D.M. (Brown et al., 2012). The authors concluded that health care costs might be reduced with more CHWs integrated into the health care system. Because the outcomes were mixed, the authors of the review could not make a conclusive recommendation; thus, they recommended further studies to identify how CHW interventions helped patients avoid more costly medical expenses (Jack, Arabadjis, Sun, Sullivan, & Phillips, 2017).

Other studies have identified a positive association with health outcomes when CHWs promote health education, access, continuity to care, and community building (Spencer et al., 2011; Perry et al., 2017). Taken together, the evidence suggests benefits when CHWs integrated with the health care team to help foster consistent, culturally appropriate interventions with the community (Lassi, Kumar, & Bhutta, 2016).

CHWs in Maternal Infant and Reproductive Care

CHWs have successfully promoted breastfeeding practices, newborn care, and psychosocial support, as found in a systematic review of seventeen studies conducted in 10 different countries (Gilmore, & McAuliffe, 2013). One study showed effective gestational diabetic management among pregnant Hispanic women (Shah, Kieffer, Choi, Schumann, & Heisler, 2015). As a result, community-based programs have expanded the CHW role to include doula support from pregnancy through the postpartum period (Moore, George, & Shea, 2020). Although CHWs have shown improved access to care in MCH populations and provision of access to care, the mechanisms underlying their success, including communication strategies they use to promote trust, are not known (Jack, Arabadjis, Sun, Sullivan, & Phillips, 2017; Katigbak, Van Devanter, Islam, & Trinh-Shevrin, 2015; Heisler et al., 2009). This is an important gap in existing research and key to understanding and disseminating successful CHW interventions that promote trust, access to care, and improved birth outcomes.

Interventions with CHWs trained in preventive and basic treatment for antenatal and neonatal care are associated with lowering risks for pregnancy-related complications (Perry et al., 2018; Haver, Brieger, Zoungrana, Ansari, & Kagoma, 2015). CHWs are shown to improve access to healthcare globally, with reductions in rates of stillbirths, infant low birth weight, and neonatal mortality and improvement in exclusive breastfeeding, healthcare-seeking behavior, and adherence to tetanus immunizations (Bhutta, 2017; Gilmore & McAuliffe, 2013; Swider, 2002; Tulenko et al., 2013; Hussaini, Holley, & Ritenour, 2011; Gogia, & Sachdev, 2010).

A UNICEF-sponsored review of over 700 articles and reports (552 from peer-reviewed journals) published from 1950-2015 examined community-based strategies in MCH and infant health programs globally (Perry et al., 2017). The study found that the inclusion of CHWs in

collaborative community-based intervention strategies can help reduce risks for neonatal and perinatal morbidity (Perry et al., 2017). This review resulted in elucidating intervention strategies, including program design and evaluation, community engagement, community education of staff, recruiting volunteers and community members, and strengthening the health care system by employing community health workers. The studies recommended the inclusion of CHWs as active members of teams providing more comprehensive access to health care, noting the CHW's crucial role as community educators and case managers, providing nutritional guidance, emotional support, surveillance, and accountability (Perry et al., 2017).

Early studies of CHWs in higher-income countries had mixed results finding fewer benefits of the CHW role. As one example, there was no statistically significant difference in cost benefits or health outcomes between the experimental group (CHWs) and comparison group (no CHWs; usual care) (Morrell, Spiby, Steward, Walters & Morgan, 2000) in a National Health Service (NHS) study of postnatal support workers for 623 postpartum women in Britain (Morrell, Spiby, Steward, Walters & Morgan, 2000). The postnatal workers made home visits between 6 weeks and six months post-childbirth to provide emotional care and encourage maternal compliance to recommendations provided by midwives. The study found no statistically significant differences in cost benefits or health outcomes between the experimental group (CHWs) and the comparison group (no CHWs; usual care) (Morrell, Spiby, Steward, Walters & Morgan, 2000). Similarly, a review of 55 studies of Lay Health Workers (LHW) interventions among low-income minority groups in high-income countries, including 48 conducted in the U.S. (Lewin et al., 2010), showed improved exclusive breastfeeding but only moderately increased uptake of breastfeeding overall. The study also showed that LHWs showed benefits for immunization uptake and improved pulmonary T.B., but the evidence for reduced

child/infant morbidity and mortality rates was considered low quality (Lewin et al., 2010). Taken together, the mixed findings indicate further investigation is needed of LHWs in MCH care, particularly related to reducing child/infant morbidity and mortality.

A U.S. review of 20 studies (RCT, quasi-experimental, cross-sectional surveys, and retrospective descriptive) included 12 that focused on low-income underserved women and children (Swider, 2002), with mixed results for CHWs providing timely access to care for pregnant women. At the same time, there were some positive results, including significant improvements in mammogram screening among Native American and Latina women and increased rates of PAP tests among African American women. In children, high immunization rates follow up and receipt of asthma information in school settings (Swider, 2002; Sung et al., 1992; Blumenthal & Alema-Mensah, 1997; Navarro et al., 1998). Only three of the eight RCTs in the review used standardized measures, however, and one-third of the studies did not include a control group to measure outcomes, resulting in descriptive findings instead of comparing the effectiveness of the interventions. These earlier studies were conducted in the late 1980s and early 1990s, and the mixed results and weak research designs indicated the need for more research to evaluate the CHW role. This early work was influential in understanding some of the strengths and limitations of the CHW role and has possibly contributed to the development of the CHW role today. Taken together, the benefits of the CHW role seem to be greater in low-income or racially diverse populations where distrust is a barrier to health care.

Two additional RCTs and a quasi-experimental study showed positive outcomes in reduced neonatal intensive care admissions. CHWs successfully reached out to high-risk African American women for prenatal care and advocacy for prenatal and postpartum care by identifying and enrolling high-risk women for nursing case management services (Gonzalez-Calvo, Jackson,

Hansford, Woodman, & Remington, 1997). A follow-up evaluation of this earlier study found a 52.7% reduction in neonatal intensive care admissions from 1998 to 2003 (Stankaitis, Brill, & Walker, 2005). Further evidence supporting CHW intervention with the MCH population is shown through a quasi-experimental study of twenty-two Head Start programs in Arizona (Hussaini, Holley, & Ritenour, 2011). The Head Start sites employed CHWs for an intervention that included home visits for two years post-childbirth. The results showed improvements in prenatal care access, advocacy, and supportive services to low-income pregnant and postpartum women from diverse groups (Hussaini, Holley, & Ritenour, 2011).

Since Swider's review, eight randomized controlled trials conducted in the U.S. between 2004 to 2018 have found positive outcomes in community-based studies of integrated CHW interventions, including improved breastfeeding, parenting skills, and self-esteem among pregnant adolescents. Outcomes also included a higher number of women enrolled in community programs and lower rates of maternal reports of child asthma, maternal depressive symptoms, LBW, and miscarriages. See Appendix A for a summary of the studies.

Some of the studies showed the benefits of integrating CHWs into community-based programs. However, the other studies failed to find significant improvements. For instance, a CHW home visiting program for adolescent mothers improved parenting scores, but there was no significant impact on repeat pregnancy, depression, or linkage with primary care doctors (Barnet, 2007). This suggested that further research was also needed to understand better the specific circumstances, programs, and CHW characteristics (e.g., race, ethnicity, age, experience) associated with successful CHW outcomes. The studies also lacked a description of the socioecological and cultural differences between the sites that may have contributed to the positive outcomes. Finally, none of the studies addressed the contextual processes or

mechanisms that promoted successful interpersonal communication during CHW and patient encounters.

CHWs and Postpartum and Perinatal Depression

By considering their patient's cultural beliefs, values and attitudes, providers can help to build trust with underserved minority women who are at risk for mental health disparities (Molewyk, Doornbos, Zandee, & DeGroot, 2014). CHW-client racial-ethnic concordance and language congruence are also helpful for building trust (Street, O'Malley, Cooper, & Haidet, 2008). Providers can also assist patients with access to mental health care and provide emotional support, as this is often associated with reduced symptoms, particularly those with low income or non-white race/ethnicity (Barnett, Gonzalez, Miranda, Chavira, & Lau, 2018; Katigbak, Van Devanter, Islam, & Trinh-Shevrin, 2015; Catalani, Findley, Matos, & Rodriguez; 2009). Thus, there is potential for CHWs to address the mental health burden in their communities through interventions to reduce the high prevalence of postpartum or perinatal depression and their adverse sequelae on women, infants, and children (Rahman, Surkan, Cayetano, Rwagatare, Dickson, 2013).

CHWs and Trust

When a client distrusts the healthcare system, the distrust can extend to the healthcare workers who represent the healthcare systems (Singh, Cumming, & Negin, 2015). Distrust becomes a barrier to necessary health care, as a client may refuse care, leading to adverse health outcomes, as previously described for MCH populations. Health care systems have responded to this distrust by employing CHWs, known as trusted members of their communities, to "bridge the gap" between communities and health care (Hermann, 2011). Several studies suggest that CHWs work to gain their client's trust, a crucial step before implementing interventions specific

to health promotion, disease prevention, and assistance to access care (Singh, Cumming, &
Negin, 2015; Yue, 2017; Njeru et al., 2019); however, none of these studies address precisely
how this trust is earned.

A small group of CHW intervention studies has emphasized building trust as an aspect of
the CHW role. Most of these studies were conducted in countries outside of the U.S., except for
three studies (Lee, Lewis, & Montgomery, 2020; Nguyen-Trong, Leung, Micky, & Nevers,
2020; Birkel et al., 1993).

The first study by nurse scientists in the Pacific Northwest applied a didactic dialogue
education model to engage Micronesian Pacific Islanders (MI) to promote prenatal healthcare
access. The MI women poorly utilized the services compared to non-Hispanic White women, as
evidenced by the lower rates of utilization of prenatal care (24.3% vs. 62.7%, respectively) and
higher rates of LBW (9.3% vs. 5.7%, respectively), in comparison to non-Hispanic White
women (Nguyen-Trong, Leung, Micky, & Nevers, 2020). The MI community had expressed
distrust of government; thus, CHWs were employed to engage and implement the didactic
dialogue education plan. Through monthly meetings, CHWs and MI parent leaders collaborated
to develop group guidelines for the meetings, including deciding which community issues were
discussed. This study described that trust and rapport began during the first session, as MI
parents, CHWs, and nurse researchers conversed to get to know each other. With subsequent
sessions and dialogue, the MI parents became more trusting and were able to share their issues
and concerns. The findings from this study identified the community's needs, including how their
cultural beliefs have influenced prenatal care access (Nguyen-Trong, Leung, Micky, & Nevers,
2020).

The second study was conducted with focus groups of 44 community based CHWs in

New York to gather their perspectives about the necessary criteria for CHWs for certification (Catalani, Findley, Matos, & Rodriguez, 2009). This study showed that CHWs are trusted members of their community because they shared similar ethnicity, language, and life experiences. The findings also emphasized that these shared concordances allow the CHWs to understand the culture of the community (Catalani, Findley, Matos, & Rodriguez, 2009).

The third study was a three-year intervention that included CHWs for HIV health education to lower the risk for transmission among predominantly Hispanic high-risk IV drug (IVD) users in a community in San Diego (Birkel e al., 1993). The participants were characterized as having low income, low literacy, and distrust of institutions and authority figures, thus requiring a strategic plan for their engagement in the study. To gain trust with the target population, the researchers employed CHWs who remained in their respective communities throughout the research and shared racial/ethnic and language concordance with community members. The CHWs informally approached individuals in the community on a "one-to-one basis," leading to connections with intravenous drug users through this "one-to-one networking."

Each of the three studies referred to trust and the importance of building trust in the target communities. The CHW characteristics (e.g., community membership, understanding of the culture, language, racial/ethnic concordance) and institutional support were essential attributes to facilitate trust. Specific mechanisms included spending time with community members to gain familiarity, applying didactic dialogue between CHWs and clients, and approaching communities informally to identify and engage study participants. At the same time, none of the studies specifically described *how* this trust was built during the interpersonal communication. The missing element is the complete understanding of the structural process of interpersonal

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communication during the encounters during the trust-building sessions. None of the existing studies identify the mechanisms through which CHWs build trust during client encounters, including how CHWs convey respectful communication, recognized as one component necessary for health care trust (Sheppard, Zambrana, & O'Malley, 2004).

The Concept of Trust in Healthcare

The World Health Organization (2007) states that trust in healthcare develops when the system treats patients equally and respectfully. An example of how trust is facilitated in a health care system is through the interactions between the provider and client conveys respectful and caring communication (Sheppard, Zambrana, O'Malley, 2004). The process of developing trust between patient and provider requires time allowing for mutual reciprocity and the goal of a shared intention that is in the best interest of the patient (McKnight& Chervany, 2001; Lynn-sMcHale & Deatrick, 2000; Rădoi, & Lupu, 2017). When patients seek out health care, they trust the provider to recommend the appropriate care (Alpers, 2018). The trust between provider and patient is compromised when there is an uneven exchange of ideas and information (Matusitz & Spear, 2014; Alpers, 2018).

Additionally, this unequal partnership reduces the likelihood that the patient will adhere to treatment recommendations (Papadopoulos, 2006; Matusitz & Spear, 2014). When a medical provider fails to honor the patient's foundational right to fair treatment or discriminates against their patient, this is a fundamental violation of their trust. Treating patients with disregard, disrespect, or apathy, can lead to a complete breakdown in provider-patient communication (Alpers, 2018; Matusitz & Spear, 2014).

This asymmetric communication often occurs when there are cultural differences between the provider and the patient and is most often observed with low-income patients or

members of racial/ethnic minority groups (Alpers, 2018; Papadopoulos, 2006). In some cases, the provider may lack cultural sensitivity (Kang, Tucker Wippold, Marsiske, & Wegener, 2016), while in other cases, the provider may harbor racist beliefs (Stepanikova, 2006; Penner et al., 2016). Racial discrimination was most evident in the Tuskegee Syphilis Experiment (Gamble, 1997), and with the illegal and uninformed sterilization of Native American women performed by the Indian Health Service (IHS) during 1973-1974 on women under twenty-one years old (Lawrence, 2000). Fortunately, these acts committed by medical doctors were discovered after complaints to an elected official resulted in an investigation by the Government Accounting Office (Lawrence, 2000). These misdeeds, however, left an indelible mark in the history of racial injustice in healthcare, most felt by the racial/ethnic groups that were affected, but also extending to other groups. This erosion of trust in health care, resulting from the occurrence and widespread public knowledge, has created long-lasting, intergenerational effects with individuals on guard for inappropriate care in their interactions with health care providers and systems.

Healthcare Trust Theoretical Frameworks

Trust is the initial step between patient and provider and sometimes relies on pre-existing relationships, or previous experience, or confidence in the provider's reputation (Hupcey, 2002; Winn, Hetherington, & Tough, 2017). A literature review identified critical aspects to building trust between provider and patient: knowledge competence, continuity of care, and respectful interpersonal communication (without racial bias or discrimination) (Murray & McCrone, 2014). Two of the studies in this review include grounded theory studies by Sheppard, Zambrana, & O'Malley (2004) and Hupcey (2001). Hupcey's model of trust and healthcare demonstrates how previous experiences, along with familiarity and confidence in providers, influence and informs a patient's perspective before entering the healthcare system (Hupcey, 2001). These factors

influence how a patient will seek health services, including decisions to delay seeking care

(Winn, Hetherington, & Tough, 2017; Figure 1). This framework illustrates where distrust can

occur due to previous experience but does not identify how the trust is facilitated in any of the

mechanisms or components of the framework.

Figure 1. Hupcey's Concept of Trust and Health Care
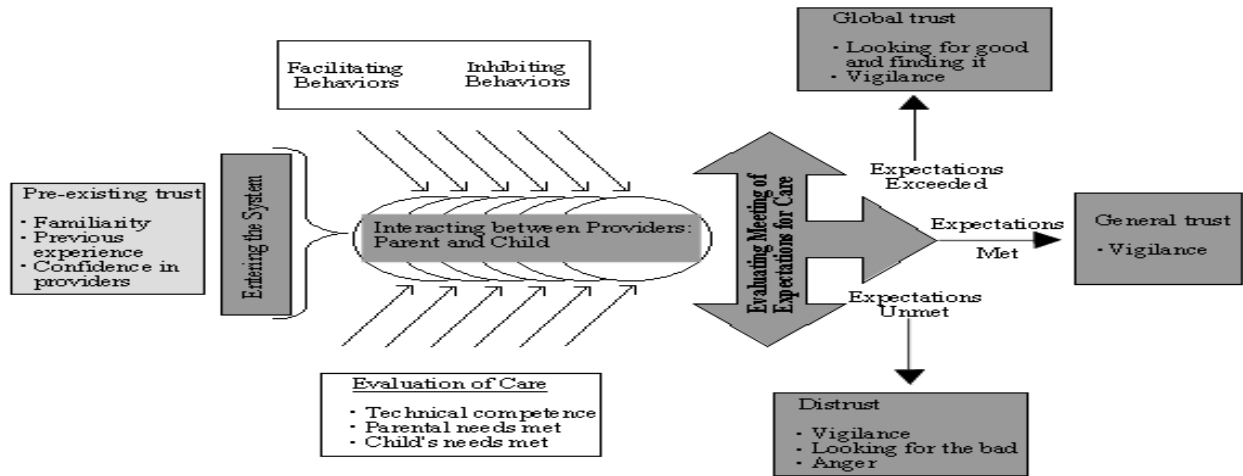
The findings from Sheppard, Zambrana, & O'Malley (2004) show the importance of providers

demonstrating caring and empathy during communication with clients, having continuity of care,

competence, as well as institutional factors that influence client trust. For example, a client who

experiences explicit or implicit bias during an interaction with providers may lead to distrust. In

turn, this can lead to the client's unwillingness to seek further care or adhere to treatment and

dissatisfaction with the visit (Sheppard, Zambrana, & O'Malley, 2004). See Figure 2.
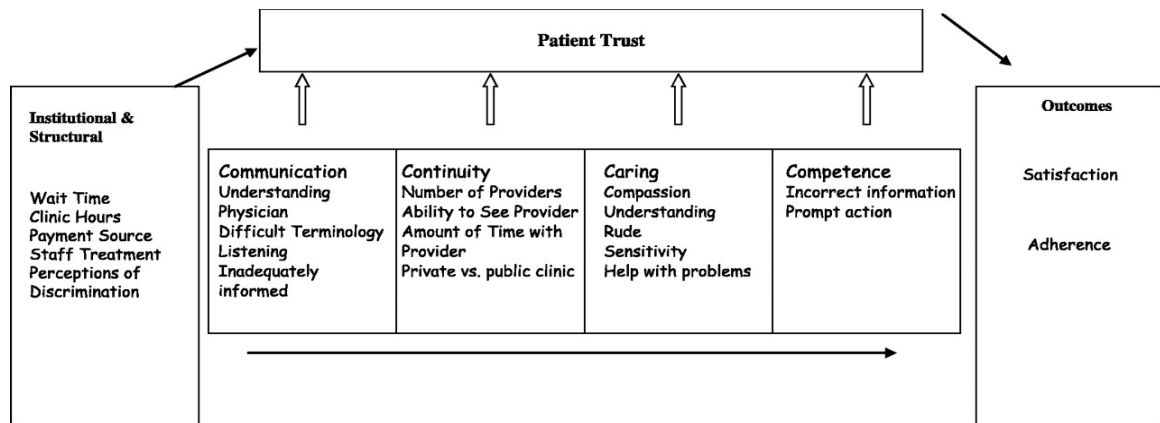
Figure 2. Sheppard, Zambrana, & O'malley, (2004)

In other work, communication and competency are two significant aspects of trust (LoCurto & Berg, 2016). Communication in the context of interpersonal interactions between provider and patient is crucial for a successful encounter (LoCurto & Berg, 2016). Without initially establishing trust, the patient cannot enter the relationship needed with the provider to develop mutual goals, reciprocity, and expectations necessary for treatment (Lynn-sMcHale, & Deatrick, 2000; LoCurto, & Berg, 2016). Additionally, patient-centered care, a common strategy that includes patient values in the treatment plan, requires that the provider treats the patient with respect, avoiding stereotyping or bias, and takes a collaborative approach to treatment decisions (Tucker, Arthur, Roncoroni, Wall, & Sanchez, 2015). Importantly, adherence to a treatment regimen is more likely to occur when health professionals determine treatment decisions by respecting the patient's preferences (Breen et al., 2009).

Interpersonal Communication

Interpersonal communication between the patient and provider is integral to establishing trust (Matusitz & Spear, 2014). In turn, this trust can promote adherence to treatment, preventive behaviors, and continuity of care (Rădoi, & Lupu, 2017; Thom, 2004; Matusitz & Spear, 2014). Non-verbal communication, including demeanor and facial expressions, can influence how

patients understand and accept the health information communicated by the provider (Matusitz & Spear, 2014). Miscommunications can lead to patient avoidance of required preventive screening or treatment, including reproductive and antenatal care (Nguyen, Tran, Kagawa-Singer, & Foo, 2011; Sheppard, Zambrana, & O'Malley, 2004). The resulting discontinuity of care and non-adherence to treatment can increase the risk for poor health outcomes (Thom, 2004; Kaplan, Calman, Golub, Davis, Ruddock, & Billings, 2006).

Poor communication can also lead to adverse patient experiences. Providers may exhibit a lack of respect or a sense of apathy towards the patient (Sorkin, Ngo-Metzger, & De Alba, 2010; Pavlish, Noor, & Brandt, 2010). Providers may harbor racial bias or may be uninformed about the patient's cultural health beliefs (Kang, Tucker, Wippold, Marsiske, & Wegner, 2016). Furthermore, language barriers can make all these issues even more complex (Wolfe, 2016).

Successful interactions can occur when providers are attentive through careful listening, thus building the patient's confidence and trust in the provider's recommendations (Gao, Burke, Somkin, & Pasick, 2009; Matusitz & Spear, 2014). Cross-cultural health encounters present challenges, as members of minority populations bear the burden of being the historical victims of racial injustice perpetrated by the healthcare system (Matusitz & Spear, 2014; Armstrong et al., 2014; Saha, Beach, & Cooper, 2008). Yet intercultural provider-patient communication is essential given the demographic shift in the U.S., with non-Hispanic White Americans predicted to compose less than half of the population by 2044 (Craig, Rucker, & Richeson, 2018).

Respect and Care

Patient-centered care emphasizes the inclusion of patients in the decision-making process, which can reinforce perceptions of respect and care (Blanchard & Lurie, 2004; Jones, Lattof, & Coast, 2017; Chaar, 2017). As a result, feelings of trust towards the provider improve,

particularly among diverse community members who have previously experienced

discrimination (Wheeler & Bryant, 2017; Coats, Downey, Sharma, Curtis, & Engelberg, 2018;

Stagno, Crapanzano, & Schwartz, 2016; Cuevas, O'Brien, & Saha, 2019). This is demonstrated

in a qualitative study of 32 community dwellers from different geographical locations in

Pennsylvania, finding that the facilitation of trust relies on respectful and caring encounters, as

well as provider competence and cultural awareness (Hupcey & Miller, 2006). Demonstration of

appropriate cultural awareness during interactions with patients of diverse racial backgrounds is

foundational for providers to build a successful, trusting relationship. Multiple studies confirm

experiences of disrespect in healthcare among African Americans, Hispanics, Native Americans,

and Asian Americans (Blanchard & Lurie, 2004; Abel & Efird, 2013; Attanasio & Kozhimannil,

2015; Vedam et al., 2019). A better understanding of how trust is facilitated through respect and

caring could inform provider education curriculum or instruction in cross-cultural training

(Balcazar et al., 2011).

Gaps in the Literature

Multiple studies confirm the importance of client trust for a successful implementation of

treatment or health-related intervention. However, none of the studies describe the specific

mechanisms related to interpersonal communications. For instance, respectful communication is

a necessary component of client trust. Still, few studies describe how respectful communication

is conveyed, particularly when interacting with clients from diverse racial and ethnic

backgrounds, specific age groups, or other diverse communities, where there is a historical

distrust of healthcare.

In the few studies that identified trust-building strategies between the CHW and client,

the findings centered around building trust with a community. Birkel et al. (1993) described

mechanisms that involved the indigenous health workers getting to know individuals in the community to network to gain access to potential clients. However, this strategy did not include details about how the indigenous health workers approached individuals in the community, what they said to gain trust or any other aspects of their trust-building strategy.

Both Hupcey (2001) and Sheppard's (2004) developed theoretical frameworks that include the institutional and health professional factors that influence patient trust, including communication. Sheppard's framework describes broad concepts, such as empathy and compassion for interpersonal communication, but does not address respectful communication. Hupcey" framework identifies pre-existing experience as a factor for pre-existing trust, as well as provider's inhibiting or facilitating behavior, but the framework does not specify the mechanism for building trust during an interpersonal communication between patient and provider.

Taken together, the literature in this review strongly supports further exploration of how CHWs build trusting relationships with women of color and with low income. The well-documented and persistent disparities in MCH outcomes across the perinatal continuum of care by race/ethnicity underscore the importance of understanding the factors underlying these differences to facilitate health care access and delivery for diverse communities. They also emphasize the importance of community programs and the critical role of CHWs, including how they build trust with clients who have a historical distrust of health care.

The proposed study is designed to address the gaps in the literature and key to understanding how to build trust with at-risk low-income women from racial-ethnic backgrounds and distrust health care. Understanding how to lower the barrier of distrust will facilitate access and acceptance of MCH care and, ultimately, improve maternal and birth outcomes and address related disparities. This study further seeks to identify the operational processes in CHW

interpersonal communication that engender respect and care in their work with women from low-income racial/ethnic minority groups. The study uses qualitative inquiry, specifically grounded theory methodology to elicit CHW perceptions and identify their most effective communication strategies. The results contribute to the development of a theoretical concept to inform community-based programs and policy, with the overarching goal of addressing health system distrust (Office of Minority Health, 2013c; Molewyk Doornbos, Zandee, & DeGroot, 2014).

Research question

The research question for this study is:

How do CHWs facilitate trust with low-income racial minority women at risk for MCH disparities and who have a historical distrust of the healthcare system?

Specific Aims

1. Using a grounded theory approach with semi-structured interviews, I aim to understand Community Health Worker (CHW) perceptions of how they build trust with women from low-income, racial/ethnic minority groups who have a historical distrust of the health care system and are at-risk for adverse maternal child health (MCH) outcomes and disparities.

2. Through focus groups, I will further explore with CHWs the factors they identify as important to building trust and other relevant themes that arise during the interviews. The information gathered will be used to develop grounded concepts and a theoretical framework further.

Chapter Three: Methodology

Research Design

This qualitative study uses a grounded theory methodology and social constructivist approach. Grounded theory is appropriate when little is known about a phenomenon, and the aim is to explore the processes of the phenomena through an inductive process (Birk & Mills, 2015). Unlike a deductive approach, which relies on previous data to identify the existence of the phenomenon based on findings from a literature review (Elo, & Kyngäs, 2008), an inductive approach builds on data to develop the theory or concept (Birks & Mills, 2015). Grounded theory methodology is appropriate for the question at hand because: 1) there is a demonstrated gap in the literature related to how CHWs' building trusting relationships with women at-risk MCH disparities, 2) current theories that address patient trust in health care do not explain the mechanisms that build trust, including during the CHW encounters with MCH populations; thus the theory, generated from the data will be novel; and 3) the grounded theory analytical process is central to identifying relations associated with the theory (Birks & Mills, 2015; Charmaz, 2014). Grounded theory can also be applied to study the social processes and perceptions of human motivation, identity, prejudice, emotions, conflict, and interpersonal cooperation (Charmaz, 1996), including building trust. In critical inquiry, grounded theory serves as a transformative paradigm that addresses social injustice through qualitative research (Charmaz, 2017).

The social constructivist approach adds the demanding and arduous task of self-consciousness methodology, or researcher reflexivity during data collection and analysis (Charmaz, 2014). This scrutiny extends to the data analysis, in that emergent data are probed during subsequent interviews or using another data collection method, such as a focus group

(Charmaz, 2017). This process is an integral part of theoretical sampling, where initial coding and patterns are further probed to pose critical questions for a better understanding of the concept during data collection and analysis (Charmaz, 2014).

The social constructivist framework also considers the researcher's subjective interpretation (from experience) and understanding of the data, including the social and structural contexts during participant interactions, using reflexive journaling and memos (Charmaz, 2014). The researcher must be aware of any nuances that could influence how the interview subject responds, including differences in environmental influences during data collection, participant experiences, or culture (Charmaz, 2014). This inductive, iterative process requires rigorous analysis of the data (Charmaz, 2000; Glaser & Strauss, 1967) to illuminate the structural mechanisms of the social phenomena of interest.

Specific to the current study, grounded theory and social constructivism inform data collection and analysis applied to study the mechanisms of building trust with women at risk for adverse health outcomes and MCH disparities due to social injustice and implicit or explicit bias. The findings will further uncover the human motivation and interpersonal cooperation within CHW communication strategies and their complex interplay with women's experiences of prejudice and healthcare system distrust.

Ethical Considerations

This study was reviewed and approved as exempt by the UC Davis Institutional Review Board (IRB). Participants were offered $30.00 for interview participation and $50.00 for participation in a focus group, which amounts one to two times the average CHW hourly salary, high enough to encourage and recognize participation without coercion. I began each interview and focus group with an introduction to the study, including the purpose and the reason for CHW

participation, my credentials, work experience, and time for questions. The opening was to assure that participants had a thorough understanding of the purpose, understood their role in the study, and that their participation was voluntary, which are critical ethical considerations (Giardino, Riesenberg, & Varkey, 2021). Participants were informed that their responses were being audiotaped (or recorded on Zoom) and that, to protect privacy, all recordings would be uploaded to a password-protected external hard drive to which I solely had access. I also informed participants that the recording would be deleted after the research was completed. Finally, I agreed to send a copy of the published paper to any interested participants.

Recruitment

Preparation for Recruitment

Preparation for recruitment began in 2019, during the San Diego Promotores Annual Meeting, the American Public Health Association (APHA) Annual Meeting, Community Health Worker Section Pre-Conference, and at a UCSF sponsored conference in Fresno, California. These conferences held sessions focused on CHWs, on structural racism in health care and healthcare system distrust. During the conferences' networking opportunities, I engaged in conversation with CHWs to determine if there was an interest in the topic of my study. During these informal conversations, CHWs were vocal about their concerns about discordant communication between providers and patients, which created barriers to developing reciprocal relationships necessary for successful patient-provider interaction and treatment plans. CHWs confirmed that they also observed during office visits with their client's microaggressions that appeared to represent discrimination (e.g., race, age, language). These conversations and observations confirmed the need for the current study.

Although purposive sampling was the primary guide for my sample selection, I used

three forms of sampling during recruitment: criterion, snowballing, and purposive sampling. (Each is described in the subsequent sections.) I began with criterion sampling to gain broad perspectives of CHWs, specifically focusing on CHWs who worked in programs that served women from socially disadvantaged communities and specific racial/ethnic minority groups, whether or not they had women in their caseload. In qualitative grounded theory research, this strategy allows for openness, and a broad spectrum of CHW settings, backgrounds, and viewpoints, thus maximizing the opportunity for rich data (Moser & Korstjens, 2017). The criterion sampling identified specific criteria among CHWs, where experience and employment varied, which helped narrow the recruitment. Snowball sampling was also used to gain access to other participants through referrals from previous participants (Moser & Korstjens, 2017). Finally, purposive sampling focused on selecting participants who are most likely to be able to answer the inquiry and the purpose of the study. All participants spoke English.

Criterion sampling

The initial sampling included the basic inclusion criteria for interviews, also known as criterion sampling (Moser & Korstjens, 2017; Charmaz, 2014). The criteria were that the individual: 1) identified as a community health worker; 2) had worked a minimum of 6 months experience as a trained CHW; and 3) was employed by a program that served low-income racial/ethnic minority populations, including women with maternal-child health care needs. Although CHWs may have different titles (e.g., health educator, peer navigator, lay health worker, doula), they are all trained to serve all at-risk populations, particularly low-income racial/ethnic minority groups (Balcazar et al., 2011).

Snowball sampling

Snowball sampling (i.e., pertains to selecting participants based on referrals from

previously selected interviewees to identify potential samples (Moser & Korstjens, 2017) was also used to identify many participants. As an example, the supervisors I met recommended CHW participants who could answer my inquiries. The participants included doulas interested in being interviewed, CHWs who worked in a housing transition program and had encounters with acutely homeless pregnant women and families, and Promotoras who worked in a Healthy neighborhood program in Hayward helping women at-risk for MCH disparities).

Purposive Sampling

Although I started with criterion sampling and snowball sampling, purposive sampling, a purposeful strategy to select participants who may best answer the inquiry (Chun Tie, Birks, Francis, 2019), was the primary guide for my recruitment strategy. I recruited from CHW organizations in locations serving individuals from minority racial/ethnic and socio-economically disadvantaged populations, including women with MCH needs. When the data showed a recurring difference in the statements contributed by CHWs who worked with MCH populations and those who did not (about ten interviews), I applied purposive sampling. Because this sampling occurred concurrently with the analysis, it is described in further detail in the analysis section below. CHWs who responded in this phase of sampling worked in locations and organizations that served racial/minority women of child-bearing age.

Recruitment Timeline

Participant recruitment for the interviews and focus groups occurred between February and August 2020, with the last focus group conducted in September 2020. The first formal recruitment occurred during the Northwest Regional Primary Care Association's (NWRPCA) annual conference, Migrant and Community Health, held in February 2020. After the conference, due to COVID-19 shelter-in-place mandates, contact with participants was restricted to telephone

or Zoom meetings. I emailed the study flyers to leaders of the APHA CHW section and the San

Diego County Promotores Coalition (SDCPC). The moderator of the SDCPC responded by

granting me a time allotment to present my study and recruitment information during their

monthly Zoom meetings. I also followed up with several local non-profit organizations in

Central California that actively recruited and employed CHWs.

Snowball sampling occurred almost simultaneously with criterion sampling. For

example, CHWs interviewed early in the study referred me to other CHWs who worked in their

respective programs. Six participants were recruited using criterion sampling, twelve from

snowball sampling, and the remainder from purposive sampling.

Data Collection

The one-on-one interviews with CHWs were conducted from February 2020 through July

2020 via telephone or using the Zoom video meeting platforms, except for two February 2020

interviews with CHWs at the NWRPCA conference held in Sacramento, CA. before the COVID-

19 pandemic travel restrictions. The focus groups were held in August and September 2020,

using the Zoom meeting video platform.

In grounded theory, data analysis begins during and continues after data collection

(Charmaz, 2014). Thus, as I collected data, I followed a systematic process that involves specific

components as described in the following sections.

Memo writing.

I began memo writing during data collection in both the interviews and focus groups to

document my qualitative progression, including notes about contextual and environmental

attributes and differences and how these might influence the findings and coding process (Birk &

Mills, 2015; Charmaz, 2014). Memos also serve as reflexive journals (i.e., to identify any

reflexive bias and how past experiences may confirm or conflict with the interviewee comments) and as documentation of the study procedures and research activities (Creswell & Miller, 2000).

Because my data collection method primarily used telephone or Zoom video interviews, my memos pertained to the data, as it was collected, how participants responded to the questions. Examples include how their responses may be based on their age, experience or culture, and perceptions about my questioning style that may have influenced the responses. I was consciously aware of how I asked questions and responded to participant comments to minimize subjectivity during the interview. I did not agree or disagree with participant comments, carefully watched my facial expressions on video, and sustained awareness of what was being said, particularly for statements that needed clarification.

After each interview or focus group, I wrote a memo to identify any new codes and codes aligned with previously identified codes. All interview and focus group recordings were uploaded to Atlas.ti software that can identify recurring codes, the number of recurrences and includes a space for memos.

Reflexivity

My public health background and previous work with CHWs as a public health nurse and as a community health instructor in higher education shapes my understanding of the topic of interest. My knowledge about the CHW's success in community health also reinforced my decision to conduct this study. As a researcher, my previous opinion, perceptions, or biases about CHWs may influence my analysis of the data and must be taken into consideration during grounded theory analysis (Charmaz, 2014). Accordingly, beginning with data collection and continuing through analysis, I aimed to bracket (a process that alleviates the researcher's presumptions, biases, beliefs) my preconceptions, remaining fully aware that these

preconceptions could taint the data and affect the trustworthiness of the study (Tufford & Newman, 2012). More specifically, I used journal entries to bracket my preconceptions after I listened to each interview or reviewed transcripts to identify any indications that my prior knowledge, experience, and perceptions may have influenced how the CHWs responded based on how I asked questions or how I determined the codes.

As an example, bracketing began during preparation for recruitment at the conferences. The CHWs I met in San Diego and Hayward, California, and Philadelphia, Pennsylvania, identified trust as an issue in healthcare before the study began. In contrast, in my own experience working with CHWs in a proactive preventive care program for low-income racial/ethnic minority populations, healthcare system distrust was not an apparent barrier. Instead, the access-to-care barriers that I identified with my work with CHWs included language, navigating the Medi-Cal System, transportation to medical appointments, and lack of health knowledge. This understanding helped me bracket my perceived understanding of CHW experiences as an observer of their work performance. I did not have the contextual basis to fully understand their motivation and determination to overcome barriers to care, including mechanisms for building trust. Thus, my background experience was insufficient to substantiate or disagree with CHW comments about their perspectives of building trust with women at-risk for MCH disparities.

Interview Process

All interviews were scheduled based on the CHW's availability. The first three interviews were held face-to-face in sitting areas at a national conference, located in a private corner, away from other conference attendees. These three interviews were time-constrained, as they were conducted between conference sessions during the lunch hour and may have ended

prematurely as the after-lunch conference began. One participant was a CHW supervisor and offered to introduce me to two other CHWs who worked in her program. Subsequently, I was able to interview both CHWs by telephone. The third CHW was not included in the study, as she had only three months of CHW experience. I also met a fourth participant, a supervisor and Promotora from Oregon, who agreed to be interviewed by telephone. We were unable to schedule time for the interview during the conference. The subsequent 24 interviews were held by phone and the final three interviews by Zoom.

The semi-structured interview guide (Appendix B) began with a broad question about the CHW's program work experience, not specific to the women in their caseload, to understand the participant's experience and knowledge of the topic (Charmaz, 2014). The following questions in the interview guide covered the CHW's work experience, including how they chose to become a CHW. Then, they were asked about typical problems faced by the clients they served, including barriers to care and how they helped their clients to address these problems. The interviews progressively became more focused as CHWs began to identify issues related to barriers to care, primarily due to the social determinants of health, including difficulties with transportation, socio-economic needs, or inadequate knowledge about navigating the health care system. The responses segued to discussing issues related to client reluctance to continue care or return to see their provider. I used probing questions: (e.g., could you tell me more about respect? or what about the social determinants of health?) to explore CHW perceptions more deeply. (Appendix B)

All CHWs (except one who did not work with racial/ethnic minority populations) confirmed that initially, distrust of the CHW was an access barrier that required strategic communication. Respect also arose as a concept that CHWs identified as necessary for building

trust. My follow-up questions included, "how did you get your patients to trust you?" and "what does respect look like?" CHWs often answered with scenarios about particular patients in various situations. After each interview, I asked the participants questions from a demographic questionnaire (Appendix D) and audio recorded their responses.

Focus Groups

Focus groups were scheduled based on CHW availability. CHWs previously interviewed were also invited to participate in the focus group discussion to 1) further explore concepts that required clarification and 2) build on their knowledge and previous experiences, whether confirming what another CHW had stated or giving an example from their own experience. The structure of the social interactions within a focus group encourages and affects how participants build on their shared knowledge and experiences; thus, it can reveal more in-depth perspectives that would not have emerged during an individual interview (McLean & Thorne, 2003).

Focus groups also create a social environment where data that emerges reflects different approaches from different CHWs with different lived experiences (amongst other factors-e.g., educational background, work experience). As CHWs discuss these differences, they may also gain insight into their approaches' similarities and differences. This shared narrative approach applies "meaning-making" as participants integrate their experiences and perspectives, deriving a sense of meaning from shared knowledge and practice (McLean & Thorne, 2003). The resulting discussion between participants about their attitudes, behaviors, and communication can create an atmosphere that generates new themes or highlights current shared importance themes (Breen, 2006).

Each Zoom focus group began with an introduction of myself and the participants. Participants described their work, location, organization, and populations served. I explained the

purpose of the focus group was to explore two concepts raised in multiple interviews with varying perspectives and clear patterns and recurrences that needed further discussion to help me understand their contextual meaning (Appendix C).

Data Analysis

The components that distinguish grounded theory analysis from other qualitative methodologies are constant comparative analysis and theoretical sampling. Because I am applying the grounded theory of Charmaz' (2014), coding (i.e., a brief descriptive categorization of sections of the data) is further distinguished as initial coding (i.e., themes described in gerunds), focused coding (i.e., integration of initial code that is similar and relevant for the development of theory), and theoretical coding (i.e., show the implicit relationships between focused codes that address the problem of the central inquiry). As patterns emerge, initial codes are identified, the researcher can begin to converge the initial codes to categories, followed by the selection of focused codes for the foundation of the grounded theory (Charmaz, 2014). Further, the researcher reviews new comments with previously collected comments to identify patterns or the emergence of statements not previously stated (initial codes) and relevant to the inquiry (Charmaz, 2014). Thus, using these different types of coding, the grounded approach seeks to discover theory after a rigorous interpretive systematic constant comparison analysis. (Charmaz, 2014; Glaser & Strauss, 2967).

Constant Comparative Analysis

Constant comparative analysis occurs during the data collection and analysis, comparing emergent codes with previous codes and throughout focused coding and theory development. (Glaser & Strauss, 1967). Constant comparative analysis is also described as identifying the "core categories," including emergent concepts, similarities or differences between concepts, and

the integration of the codes for the development of a theoretical framework (Hallberg, 2006). A grounded theory study can have multiple core categories identified early in the data collection and during the advanced stages of data collection (Charmaz, 2014). This flexibility accounts for the variations in concepts that can arise during data collection, potentially enriching the data and the subsequent theoretical framework.

Theoretical Sampling

Theoretical sampling is fundamental in the constant comparative analysis aspect of grounded theory (Charmaz, 2014). The process of theoretical sampling moves beyond the detection of codes and patterns through the ongoing probing of codes and examining the relationship between codes. The analysis requires that the researcher continuously scrutinize how the data are relevant to the inquiry and the eventual theoretical framework. As needed, the researcher can delve deeper with probing questions during the interview, decide to select future participants who can best illuminate the concepts, or conduct a follow-up interview with a participant (Chun Tie, Birks, & Francis, & Francis, & Francis, 2019; Charmaz, 2014). Thus, the ultimate aim of theoretical sampling is the development of theory through an iterative, inductive process grounded in the data (Mills, Birks, & Hoare, 2014).

Coding

Initial Coding. Initial coding includes line-by-line coding, which represents meaning relevant to the topic (Charmaz, 2014). The code is written in gerunds, meaning 'ing' is added to the verb to make the code active, as the researcher becomes more engaged by describing the code. For instance, a code 'listen to the patient' (second-person perspective) becomes 'listening to the patient' (first-person perspective), the gerund version. Charmaz (2014) asserts that through writing gerunds, the researcher interacts more deeply with the data, which facilitates the analysis

by helping to identify implicit meaning, explore emerging concepts, or discover how concepts are linked.

After each interview, I saved the audio/Zoom interviews and focus group discussions on an external hard drive, then transferred the data to Atlas.ti (qualitative analysis software) for transcription. I coded the statements or quotation comments (Atlas.ti terminology for the statements) using gerunds during transcription. (e.g., 'communicating with empathy,' 'spending time,' or 'explaining risks, diagnosis, or treatment.') During the initial coding, I also wrote memos saved as 'Recruiting and Sampling' and 'Transcribing and Initial Coding' that included observations of statements that reflected new concepts, recurring concepts, and CHW characteristics. This helped me to organize the memos as I progressed through analysis.

The statements were coded broad concepts, such as 'building trust,' 'showing respect,' or 'listening to the patient.' As the analysis progressed, some initial codes were recoded to be more specific and reflective of the nuances of data. For instance, I further categorized quotations that were in "listening to the patient" to include "affirming and normalizing shared experience."

Focused Coding. Focused coding further categorizes initial codes and then identifies the codes relevant to the study, thus distinguishing the patterns and relationships between the codes (Charmaz, 2014). The application of constant comparative analysis differentiates between the initial codes and advances them into a focused code (Charmaz, 2014). Focused coding can be initiated when the researcher begins to identify patterns early in the data collection. At the same time, the focused coding can change as the data collection progresses, depending on subsequent participant statements. As the researcher collects more data, diagrams of focused codes can help uncover the relationships between the concepts within the focused codes (Charmaz, 2014). A visual diagram of the codes versus reading the codes from a text or table format may simplify

deciphering relationships or links between codes and discovering theoretical codes.

The focused coding of this analysis required an overall view of all codes to identify how they are related. During the interviews, I first distinguished the codes that reflected comments made by CHWs who worked with MCH groups specific to the inquiry. Using constant comparative analysis, I developed the following codes: 1) "showing dignity and respect," 2) "showing humility," 3) "respecting patient's diversity and individuality," 4) "showing patience," 5) "addressing, acknowledging patient's pain, illness, situation," 5) "addressing SDH needs," 6) "assessing for patient's readiness and motivation," 7) "communicating in patient's familiar environment." I then compared the recurrences (grounded in the data) of each code between the CHW-MCH and the CHW-non-MCH groups.

Also, as the focus groups did not reveal any new codes but clarified and merged initial codes, I continued with the second step of this analysis and categorized the codes, using the diagram function of Atlas.ti. After revision, three diagrams of categorized focused codes illustrated the interplay of the broad spectrum of CHW comments about their work and behavior. The diagrams helped to show the relationships between the concepts to identify which codes intersected and to identify which codes were relevant to the CHW-MCH groups

Focused Group Coding Analysis. Two themes identified in the individual interviews (described further in Chapter Four) as needing further clarification were explored in focus groups: "meeting them where they're at" and "empowerment." The CHW comments regarding "meeting them where they're at" were further analyzed and were reassigned to existing initial codes: "communicating in patient's familiar environment," "assessing patient's readiness," "respecting individual's choices," and "addressing patient's illness, pain, situation." Empowerment descriptions were further analyzed and merged with existing codes: "learning

from each other" and "organizational role." The latter code was not included in the categorization for focused coding, as this code is not relevant to the inquiry.

Theoretical Coding. Theoretical coding is achieved after analyzing how all the codes intersect or relate to the development of the theory (Glaser, 1978; Charmaz, 2014). During this stage, I returned to the quotation comments identified in my focused codes for another analysis. A more in-depth analysis of these comments revealed the fundamental mechanisms that described how CHWs build trust with women from racial/ethnic minority backgrounds who are at-risk for MCH disparities. The resulting diagram illustrated the mechanisms at specific stages of a client-healthcare pathway at the initial CHW encounter. Multiple revisions of this diagram resulted in the final theoretical framework that is described in Chapter Four.

Trustworthiness and Rigor

Respondent Validation (Member-checking)

Also known as member-checking, respondent validation is accomplished by returning to the interviewees to check for the credibility and accuracy of the data (Creswell & Miller, 2000). At the end of each interview and focus group, I asked permission to contact each participant to review the data. All CHWs agreed. Subsequently, I met with participants in three focus groups, representing three geographical locations: Pacific Coast, East Coast, and the Central United States.

Resonancy

Resonancy is essential in qualitative research in that the findings should resonate with participants and show clear connections with the larger established body of knowledge (Charmaz, 2014). During the focus groups, results were presented, and participants were asked the extent to which the findings had relevance to their practice and in the context of their trust-

building communication strategies.

Triangulation

The validity, or the truthfulness of the data collected (Center for Innovation in Research and Teaching, 2019), can be ascertained through identifying potential threats to the research process. An example is researcher bias or reactivity, when participants may not respond truthfully due to the influence of the researcher-participant dynamic (Maxwell, 2004). Ways to reduce these threats include data triangulation, recording during data collection, and continuous feedback from colleagues (Maxwell, 2004). Focus groups, distinguished from individual interviews, can illuminate ideas and concepts by sharing more personal experiences, identifying problems, and expounding on differences of opinions or approaches to a problem (Carter et al., 2014).

I understood that my background in public health and previous work with CHWs could potentially influence the data. In addition to having the goal of including a diverse population of CHWs, I employed triangulation to reduce potential threats to the validity of the data. I selected focus groups as a means to triangulate the data analysis and reveal new data or clarify codes identified as vague.

Supplementing triangulation through a focus group data collection, I also shared the data with my research mentors at least monthly during the data collection, initial, focused, and theoretical coding stages.

Originality

In conducting the study, I aimed to identify novel categories of themes offering new insight into the topic and theoretical codes that reflect an original rendering of the data and offer a theoretical and social significance (Charmaz, 2014). The theoretical codes, derived after a

rigorous, constant comparative analysis of the data from initial coding through focused coding, resulted in four codes reflecting a novel perspective of how CHWs build trust and contributing to existing literature.

Usefulness.

Finally, my data and analysis offer practical interpretations that can be applied in the daily life of others (Charmaz, 2014). The findings are helpful and accessible and can be used in the daily routines of patient-provider communication within healthcare and the community. The results also inform provider training and related policy guidelines.

Chapter Four: Results

Participants

Thirty-six CHWs responded to the flyer; one was excluded due to having less than six months of experience and three did not show during their scheduled focus group. The remaining thirty-two CHWs were invited to participate in interviews and/or focus groups. Twenty-eight completed interviews, and sixteen participated in the focus groups. Among the sixteen CHWs who participated in the focus groups, twelve participated in both interviews and focus groups. The CHWs were located in California. Oregon, Texas, Chicago, Maine, Massachusetts, New York, and South Carolina.

The average age of the CHWs was forty, and most were female and Hispanic or African American. About half were married, 75% had children, and 45% had worked as a CHW between six months and five years. Table 1 describes the CHWs' sociodemographic characteristics.

The CHWs worked predominantly in community-based organizations that served Hispanic or African American communities with women and children; nine also served Asians, four served Middle-Eastern immigrants, one focused on the Farsi-speaking community, and six served recent migrants, including Haitian and Somalian refugees. The CHWs specialized in providing community resources, doula companion support, housing transition from acute situations, health education (diabetes, STD prevention, teenage pregnancy prevention, nutrition, exercise), advocacy, or training for other CHWs. The community-based CHWs worked in public health clinics or a non-profit organization focusing on low-income adults (e.g., migrants, individuals with mental health problems, individuals experiencing homelessness), neighborhood and community building (e.g., Healthy Neighborhood program or a doula program). The hospital-based CHWs helped to implement housing assistance or chronic disease management.

Most of the CHWs were outreach or resource specialists. Table 2 summarizes the CHW roles

and target communities.

Table 1
CHW Socio-Demographic Characteristics (N=32*)*

	N=32 (%) or Mean (sd)
Age	40 (11.589)
Gender	
Male	2 (6%)
Female	30 (94%)
Race/Ethnicity	
Hispanic	17 (53%)
Black	11 (34%)
Asian	1 (3%)
Native American	1 (3%)
White	2 (6%)
Marital Status	
Married	15 (47%)
Single	13 (41%)
Divorced/Separated	4 (12.5%)
Children	
Yes	24 (75%)
No	8 (25%)
CHW Years of Experience	
6 months-5 years	15 (47%)
6-10 years	8 (25%)
11-20 Years	4 (12.5%)
>20 years	5 (15.6%)

Table 2
Characteristics of CHW Roles and Target Communities

CHW's Program and Population Served	All N=32 (%)
Type of Program	
Community-based	25 (78%)
Hospital-based	7 (22%)
Program Target Population	
Women only	5 (18.7%)
Women and children (families)	11 (28.1%)

Students (14-24yo)	4 (12.5%)
Homeless, women and children	2 (9.4%)
Adults without MCH encounter	10 (31%)
Population served*	
African American (AA)	22 (69%)
Hispanic	30 (94%)
Asian	9 (28%%)
Refugee/Migrant**	6 (19%)
Middle-Eastern	4 (12.5%
White	7 (29%)
Services ***	
Health Educator	14 (44%)
Advocacy	13 (41%)
Housing Specialist	3 (9%)
Outreach/Resource	23 (72%)
Doula	3 (9%)
Case Management Assist	2 (6.2%)

*All populations are low-income. Some programs have primary target populations Black/Hispanic.
**Migrant Hispanic, Somalian, Haitian,
***Services overlap. Each service, as described by CHW

Chi-square tests were used to compare the sociodemographic characteristics of CHWs who worked solely with MCH populations versus those serving other groups. There were few differences between the groups. Exceptions were those serving MCH populations only versus other groups had higher percentages of female CHWs (100% versus 80%; p=0.03); higher percentages from Texas and South Carolina (45% versus 0%; p=0.04); higher percentages serving African American communities (85% versus 30%; p<0.01), Hispanic communities (100% versus 80%; p=0.03) and Asian communities (41% versus 0%; p=0.02). As expected, a lower percentage of CHWs working solely with MCH populations also served migrant populations (9% versus 40%; p=0.04), homeless populations (9% versus 40%; p=0.04); and individuals with mental illness (0% versus 30%; p<0.01). However, a higher percentage of

CHWs working solely with MCH populations served families (86% versus 0%; p<0.01). See

Table 3 below.

Table 3
Demographics
CHWs who worked with MCH compared with CHWs who did not work with MCH

	CHW-MCH (n=22)	CHW-non-MCH (n=10)
Gender		
%Male	0	20
%Female	100	80*
Race/Ethnicity (CHW)		
%African American	41	20
%Hispanic	54	50
%Asian American	5	0
%Non-Hispanic White	0	30
Population (Race)		
%African American	86	36**
%Hispanic	100	80*
%Asian	41	0**
%Non-Hispanic White	23	20
%Middle-East	10	18
Population		
%Homeless	9	40*
%Mental Illness	0	30**
%Migrant	9	40*
%Families	86	0**
Years of CHW Experience		
%6months – 2 years	32	40
%> 2years – 5 years	27	20
%> 5 years-10 years	18	20
%> 10 years	23	20
Geographical Location		
%California	32	60
%Texas/South Carolina	45	0*
%North East	23	40
Program Base		
%Community	86	70
%Hospital	14	30

Note: Using chi-squared analysis, we compared CHWs who worked with MCH (CHW-MCH)
and CHWs who did not work with MCH (CHW-non-MCH).
*p<0.05.   **p<0.01

Interview Participants. (n=28)

The majority of the CHWs who participated in the interviews were between the ages of 20 and 35, followed by 50-60 years. (Table 4)

Table 4
Sociodemographic Characteristics of CHWs Participating in Interviews

CHW Characteristics (n=28)	n (%)
Age	
20-35	11 (39%)
36-50	7 (25%)
50-60	10 (36%)
Gender	
Male	2 (7%)
Female	26 (93%)
Race/Ethnicity	
African-American	9 (32%)
Hispanic	15 (53.5%)
Non-Hispanic White	3 (11%)
Asian	1 (3.5%)
Years of Experience	
6mos-5years	13 (46%)
5-10 years	8 (28.5%)
11-20 years	2 (7%)
>20 years	5 (18%)
Program Base	
Community-Base	22 (78.5%)
Hospital-Base	6 (21.4%)
MCH Population	
CHW-MCH	18 (64%)
CHW-non MCH	10 (36%)

Focus Group Participants

A total of 20 CHWs participated in the focus groups. Their sociodemographic characteristics were similar to the interview participants. Most were 20-35 years of age, and female, Hispanic, had six months-5 years of CHW experience or five to ten years of CHW experience. The majority worked in community-based organizations that served MCH populations. (Table 5). The following sections provide more details about the CHW by focus group, including their geographic locations, programs, and populations served.

Pacific Coast Zoom Focus Group (n=6). All CHWs in this group were based in California; three worked through a family service organization. Two CHWs did not work with MCH clients but for a community health clinic that served mainly at-risk clients, including mental health, homeless and migrant workers. The last CHW worked in a hospital-based community outreach program.

Central United States Focus Group (n=6). Five of the six participants came from San Antonio, Texas; one CHW worked for a well-known non-profit organization in Chicago, Illinois. The five CHW from Texas worked in the same umbrella organization with the Healthy Neighborhood Program but were located in different San Antonio areas. Three of the CHWs were supervisors or trainers of CHWs. All CHWs had five to twelve years of experience and have encountered MCH clients.

East Coast Focus Group (n=8). Among the eight participants, four were from South Carolina, of which three were doulas, and one worked with high school students. Three worked through a hospital-based program in Boston that served at-risk adults and families in housing transition programs (i.e., homeless populations). Among the Boston group, two worked directly with MCH populations. The final CHW came from Maine and worked primarily with low-income non-Hispanic White populations through a non-profit hospital-based case management community program. Two of the CHWs did not work directly with MCH clients.

Table 5
Focus Group (FG) CHW Socio-Demographic Characteristics

CHW Characteristics (N=20)	Pacific Coast FG n=6 (30%)	Central U.S. FG n=6 (30%)	East Coast FG n=8 (40%)	Row Totals n (%)
Age				
20-35	-	2 (10%)	6 (30%)	8 (40%)
36-50	3 (15%)	2 (10%)	2 (10%)	7 (35%)
50-60	3 (15%)	2 (10%)	-	5 (25%)

Gender				
Male	2 (10%)	-	-	2 (10%)
Female	4 (20%)	6 (30%)	8 (40%)	18 (90%)
Race/Ethnicity				
African-American	-	1 (5%)	6 (30%)	7 (35%)
Hispanic	6 (30%)	4 (20%)	1 (5%)	11 (55%)
Non-Hispanic White	-	-	1 (5%)	1 (5%)
Asian	-	1 (5%)	-	1 (5%)
Years of Experience				
6mos-5years	-	2 (10%)	7 (35%)	9 (45%)
5-10 years	4 (20%)	3 (15%	1 (5%)	8 (40%)
11-20 years	-	1 (5%)	-	1 (5%)
>20 years	2 (10%)	-	-	2 (10%)
Program Base				
Community-Base	6 (30%)	6 (30%)	6 (30%)	18 (90%)
Hospital-Base	-	-	2 (10%)	2 (10%)
MCH Population				
CHW-MCH	4 (20%)	6 (30%)	6 (30%)	16 (80%)
CHW-non MCH	2 (10%)	-	2 (10%)	4 (20%)

Findings

Initial Codes

Four hundred seventy-four interview comments (generated by Atlas.ti and inclusive of small paragraphs) were categorized into 87 codes, then further distilled into 47 codes described in gerunds. These codes were further categorized into thirteen groups: building knowledge, building trust, communication between patient and provider, basic communication strategies, institutional barriers, personal barriers-culture, race/ethnicity, language, MCH and families, MCH and high school, MCH only, social reinforcements, structural mechanisms. These code categories served to group similar codes for analysis during focused coding.

By the 24th interview, three distinct findings emerged: 1) a code, "addressing SDH needs" that was more prominent among fourteen CHWs who worked in MCH populations when compared to ten CHWs who did not work with MCH populations; 2) a code "meeting them where they're at" emerged with differences in the quotation comments between the twenty-four

CHWs, and 3) and a code "empowerment" also differed in the quotations between the CHWs. I

decided to explore these codes further during the focus groups to illuminate how each concept

relates to building trust with at-risk low-income MCH populations. Meanwhile, I continued with

interviews until I was satisfied that data collection had achieved saturation (meaning subsequent

comments did not reveal new concepts).

Focused or Intermediate Coding

Further analysis distilled the initial codes, merging similar codes and excluding codes

that were not relevant to the inquiry. The excluded codes described the institutional role or CHW

racial or language concordance with their clients. These codes describe external components that

influence client trust but do not address the interpersonal communication mechanisms that

CHWs have described in this study. For instance, CHWs who work for a respected healthcare

system within the community will likely have an easier time building trust with clients. This is

also true for CHWs who speak the same language and can communicate with non-English

speakers or come from the same country when interacting with migrant communities.

Of the forty-seven initial codes, twenty-seven focused codes resulted from analysis of the

individual interviews' quotations and a further distillation of the codes. These focused codes

were categorized into three groups: 1) attitude, 2) attributes, and 3) action. I created diagrams for

each focused code category, illustrating relationships among the codes.

CHW Attitude and Behavior

Attitude is described as a "mental readiness to respond consistently," as evident in

behavior (Shigley & Simpson, 1988). Characteristics of attitude also include having a mental

state and value or belief that predisposes to behavior or action (Altmann, 2008). I chose the

codes representing this category as behaviors that reflect a predisposition reflective of a

particular value that is respectful of the client. These codes are shown below, including relationships between codes.

Figure 3. CHW Attitudes Focused Codes
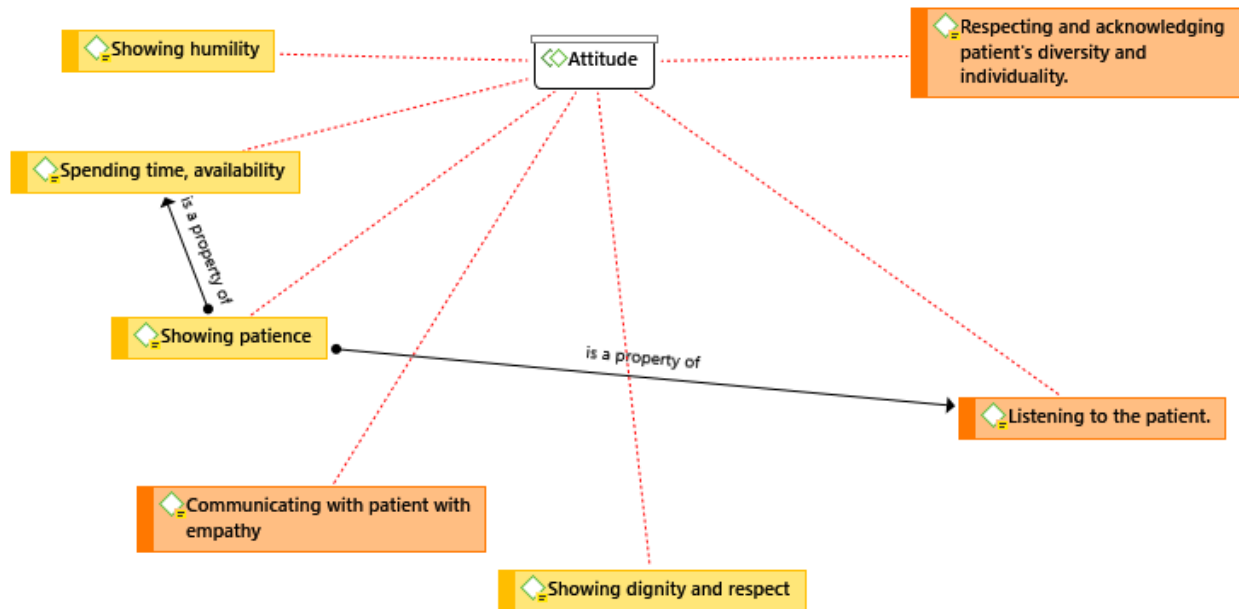
CHW Attributes

An attribute is defined as having a character or quality ascribed to someone or something (Merriam-Webster, 2021). The CHW attributes include having a shared experience and racial/ethnic concordance with their clients, being trusted by community members, treating clients with respect, understands client's culture, ease of communication about health care problems, and knowledgeable about resources (Islam et al., 2015).

Figure 4. CHW Attributes Focused Codes
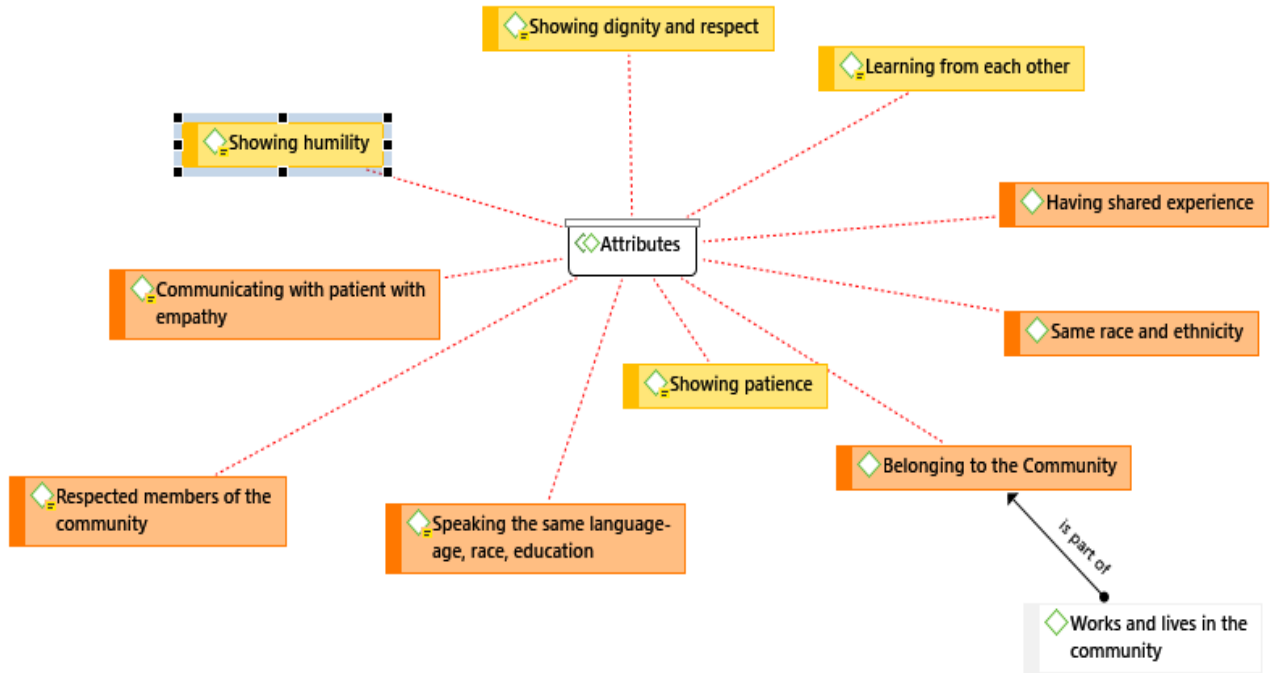
CHW Action and Behavior

CHW actions include eighteen focused codes that each describes specific CHW intervention behaviors. See Figure 5 below.

Figure 5. CHW Actions Focused Codes
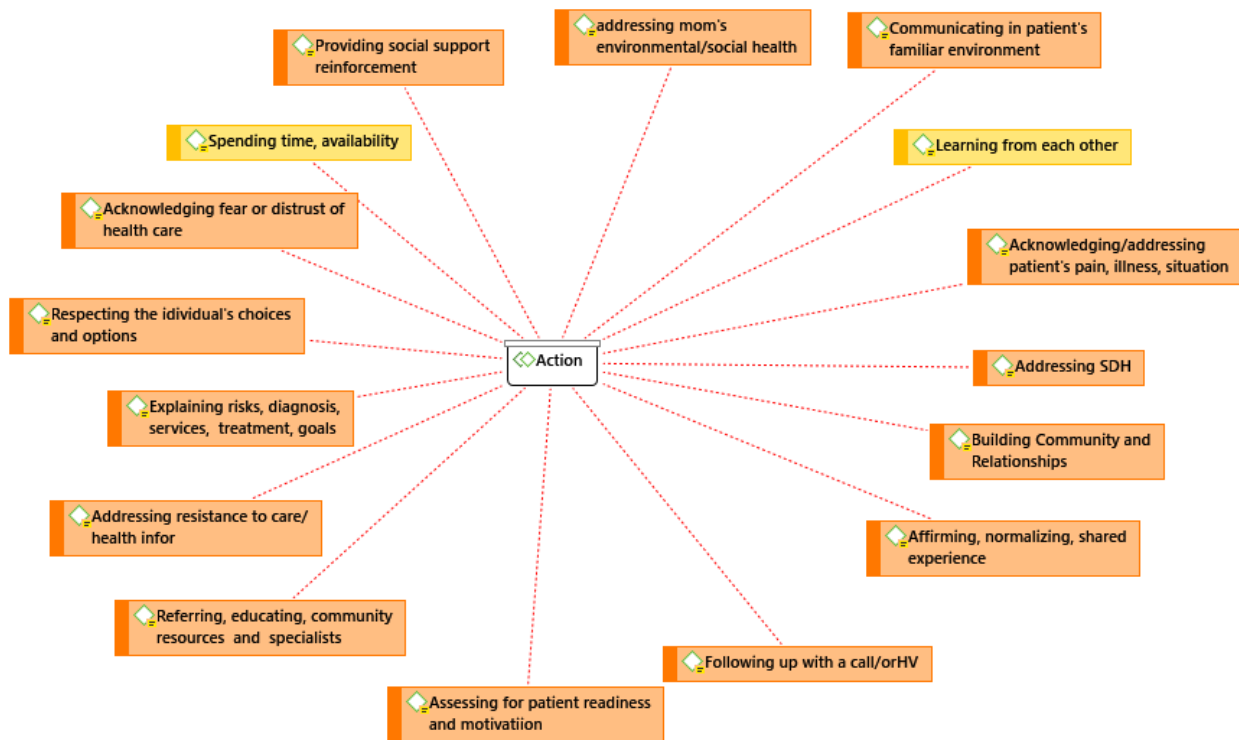
Analysis of the diagrams identified the intersected codes (highlighted in yellow), meaning that these codes overlapped with one of the other diagrams: 1) 'learning from each other'; 2) 'spending time and availability; 3) 'showing dignity and respect; 4) 'showing humility;' and 5) 'showing patience.' 'Learning from each other' and 'spending time and availability' are attributes and reflect action. 'Showing dignity and respect' and 'Showing humility' are both attributes and attitudes. These codes will be further distilled for the theoretical coding. The diagrams helped to visualize which codes were most relevant to my inquiry. I was able to see that building trust also required sustaining the trust; thus, I noticed that the trust-building mechanisms continued even after the initial trust was established.

Focus Group Coding.

During the earlier interviews, I identified three concepts that needed further clarification and discussion: "addressing social determinants of health needs," "meeting them where they're

at," and "empowerment." These concepts were further explored in focus groups. The general questions used in the focus group were "tell me what 'meeting them where they're at' means to you when you're communicating with your client? How does this help you build trust?" and "Could you each tell me about your perspective of what empowerment means to you?" In "addressing social determinants of health needs," I asked participants, "could you tell me more about what you did for the client to help them with social determinants of health?"

As the CHW focus group participants shared their strategies for gaining trust, I would further probe, asking for clarification with examples. For instance, as the concept of respect re-emerged, I would ask, "could you tell me what respect looks like when you are meeting them where they're at?" or "what do you mean when you talk about empowerment? and "how does this help to build trust?"

Social Determinants of Health (SDH).

In clarifying the code "addressing social determinants of health needs," similar codes emerged when CHWs responded to my question about "meeting them where they're at." CHWs described that their clients usually required help to find resources for their children's basic needs, including transportation, food or infant care needs, safe housing, and transportation assistance. CHW comments that describe how they addressed those client's SDH needs are below:

> CHW6 *"And also understanding the circumstances where the people live in, where we listening those needs, addressing those needs, addressing the circumstances that they are, being knowledgeable about the sources that we can help them so we can provide information about those resources."*

> CHW26: *I try to accommodate them in regards to their lack of transportation. The public library was always a good place to go because a lot of them didn't*

have a computer and were able to use the computer at the public library. And

helping with anything they need at the computer at the public library. Helping

them navigate through the sites that would help them,

CHW34 "Yes, I think so. Because like, if we have a family, and I'm going in with a

mom, trying to educate her, and she has other issues like housing, food is

concerned, you really have to be sensitive and stop the education, and focus on

that. Pregnant, also, especially if they do have, a lot of our families are not

inadequate housing, so, they're looking for a house, giving them an application."

CHW 14 "So we can start build this relationship, and we have taken formulas, and

pampers, maybe a one and done. We may not have Pampers at the moment; I

have a few in the car, then I'm gonna connect you to the services that can help

you through the process and help you a little bit further. So something we had as

a need, we would have on hand, but then be able provide that immediate

assistance, but then connect them to the services that would give a continuous

stream of what they needed. I've done that with asthma medication, I've done that

with food, I've done that with other needs that they have because we've got to

know the population",

CHWs also described encountering clients who were in unsafe environments, including living in abusive relationships. One example of a comment is below:

CHW11 "Yes, it's so important. so there's also domestic abuse, and there's a lot of

abuse from the parents, too. Especially when they're young, they made a mistake,

they're not doing it right. So reviewing that, that trust that what they doing is right

and they're beautiful.

Meeting Them Where They're At.

The "meeting them where they're at" label reflects precise words used by multiple CHWs to describe how they responded to clients who were reluctant to seek health care and uncomfortable meeting at a clinic or hospital. Specifically, CHWs described "meeting them where they're at" in two different scenarios. The first scenario was literally meeting them (the clients) at their preferred or familiar location. This could be a bench in a park, coffee shop, or their home. Specifically, the preferred location was a "safer" and familiar environment where clients would be more likely to converse openly in discussions with the CHW. The second scenario underscored the importance of the CHW recognizing, acknowledging, and affirming the client's current understanding about his/her treatment, health risks, diagnosis, or situation- as well as their health care priorities and goals. For instance, if a CHW received a high-risk client referral, the CHW communicates with the client and discovers that they are reluctant to seek medical advice about a specific condition. The CHW stated that they had to identify and navigate the underlying reasons for the reluctance and the client's experiences and perceptions of barriers to seeking care, including fear or distrust of health care, misinformation, or cultural beliefs. The CHWs emphasized that they must accept the client's current stance or decision ("meeting them where they're at") while continuing to engage with them to build trust until the client eventually makes an informed decision about whether or not to follow through with health care visits or recommendations. Depending on specific circumstances, the process could take time (multiple subsequent visits, even months after the first encounter).

The code "meeting them where they're at" was distilled to "communicating in client's familiar environment," "assessing client's readiness," "respecting individual's choices," and "addressing client's illness, pain, situation." By engaging in these actions, CHWs found that

clients were more likely to engage in future conversations or visits.

Empowerment

The code "empowerment" emerged when CHWs spoke about teaching clients how to access resources and visit a medical doctor independently. The term "empowerment" sparked a lively discussion between the CHWs, especially those who disagreed with the term empowerment in the context of "giving empowerment" versus "they (clients) are already empowered." At least one CHW from each group stated that "people are already empowered," so we, as CHWs, are "not giving empowerment." The CHWs described helping their clients learn how to realize their strengths through role-playing. They gave examples of assisting clients in learning how to be independent in calling clinics for appointments or how and what to say when communicating with doctors, using their actions to role model. One CHW described that empowerment could be supported through visual displays of resources or health education in office or clinic waiting rooms. In other words, clients can self-empower by reading and learning from the visual displays in the waiting areas.

The code "building empowerment skills" was merged with "learning from each other," and the code "organizational role" dropped from the categorization for focused coding, as it was deemed not relevant to the inquiry. The organizational role is an external influence that can help facilitate trust but is not specific to my inquiry of how CHWs build trust in the context of interpersonal communications. As described by the CHWs, the organizational role includes supporting CHW work through training and being reputable in the community. CHWs agreed that reputable organizations helped facilitate trust when clients realized the CHW worked for a respected organization.

CHWs reported that attention has been lacking on strategies that mitigate the

consequences of distrust of health care providers and health care systems. The emphasis on

helping clients through "building skills" to access care or help clients see that they are already

empowered. They also emphasized a focus on health care provider accountability of appropriate

communication with at-risk clients with low-income and racial/ethnic groups. I include two

quotes here:

> CHW8 *"Instilling empowerment, or not even, or I'm sorry, inspiring*
>
> *empowerment in the client. I hope that this work, collectively, will change how the*
>
> *clients are seen by the clinics, and the attitudes, exploring the attitudes that the*
>
> *providers and their staff have on both on the client and their involvement on the*
>
> *treatment team, and really being inclusive of that client, and because I think at*
>
> *this point, throughout the system, it's the attitude that clients know less, don't*
>
> *understand, and not being compliant, so I really appreciate the opportunity to*
>
> *comment on this and really hope these findings help to improve the attitudes in*
>
> *the clinic. Thank you"*

> CHW18 *"I guess when I think about the studies, the researchers, everything that*
>
> *people do, I hope the providers are listening to the CHWs and the different roles*
>
> *that we have and are saying. Because you can get all the information that you*
>
> *want, but it doesn't amount to or do anything to help or find the relationship or*
>
> *mold the relationships with these people, and it's all a waste. So I hope that at*
>
> *some point that physicians and doctors and people and that sort are held*
>
> *accountable to say that in order for me to continue to practice, I need to get*
>
> *trained or whatever it is, you know, what this comes out of this, on how to engage*

with people. Right? I think that's the bigger picture here, how to engage with

them, how do we support them, and so we're all giving about how this happened

to us and how we build these relationships, but if it just stops here, we're done."

Theoretical Framework

Theoretical Code Development

Before developing the theoretical framework, I had to identify the theoretical codes from both the interview and focus group codes. The quotation comments from the focused group supported codes described as trust-building mechanisms that I had already identified from the diagrams. After a careful analysis, the codes that best represented the response to my inquire are: 1) Addressing Social Determinants of Health Needs; 2) Addressing Client Pain, Illness, Situation; 3) Communicating in Client's Familiar Environment; 4) Addressing Mom's Environmental and Social Health; 5) Respecting Client's Diversity and Individuality; 6) Showing Dignity and Respect; 7) Showing Humility; and 8) Spending Time. To select the comments, I transferred the quotations to a new document that is titled with the theoretical code. Once I had accomplished this task, I carefully reviewed each comment and asked these questions: 1) "does this comment reflect the code?" 2) If the quotation relevance was not immediately apparent, why did I choose this comment as a representative of the code?" and 3) "What aspect of the code this represent and why?" Once I have satisfied my review of each comment, then I could add the code to the theoretical framework. I then reviewed the quotations of each of these codes to identify themes that were relevant to answering my question. Table 7 describes an example of one comment for each of the selected codes.

Table 6 Focused Codes/Statements for Theoretical Codes

Addressing Social Determinants of Health Needs	CHW13 *"We encounter students with the, um, no insurance, income mainly with no insurance. If they have no insurance, we help them get insurance. We have adaptations for those who live in shelter homes, so they do not have a steady home. So when we reach out to them, it's very difficult because they don't have a contact number or address or anything. Um, like that. They also utilize the school outreach center for emergencies only, so coming for a routine check-up or mental health services, or the other services that we provide, so some of them are afraid to come to the clinic"*
Addressing Client Pain, Illness, Situation	CHW9 *" We have to hear them first, then we have to change our voice, of course, the tone of our voice of course is important. We told them, "I'm really sorry to hear that something like that happened to you. I feel bad because I am working for this company. I know the experience you have was really hard. I see right now you ...but you know what, let you give me the opportunity to change that perspective to change that point of view." You know, we don't get that all time, but our customers sometimes have a little pain, and so have a different behavior. So if the person in front of you , and they're not good and they don't understand that you're in pain, well obviously, they are feeling that we are not treating you in the correct way."*
Communicating in Client's Familiar Environment	CHW18 *"So when the physician refers a patient, some of the patients we can get to on the first visit, I've had to help patients by going out on a home visit or a community based visit, so the kind of questions we ask about is to used to loosen the patient a little bit to help them to interact with us, so I'll invite the patient out and buy them a coffee, and just talk to them, uh, and try to introduce the program. I try to do, is I, uh, just try to uh, not really promote the program, but I ask the patient what they needed, so I focus on the patient because that helps them lower their boundaries, I um, so they won't say, 'she don't care about me, or she's not just selling something that I've heard before', because you know that's what a lot of people heard before. So usually when I meet the patient, it's around 5 o'clock, and what kind of help can we assist you with? And that kind of helps to start the conversation to help the patient at least identify one thing in their life that they're struggling with."*
Addressing Mom's Environmental and Social Health	CHW14 *"With pregnant moms, it really was a lot of social determinants of health and a lot of things done to them. So, a lot of things could have been domestic violence, homelessness, could have been things of that nature, so, what we would really like to do with them is try to connect with them to what their immediate*

	needs were. So a lot of times when we were there, were really what needed to do at that moment."
Respecting Client's Diversity and Individuality	CHW15 *"And that's the element of respect, because culturally, right, I know for Hispanic, right, I am a Hispanic woman, right, my elders like to be addressed one way, right, and African Americans and also older individuals like to be addressed, 'ma'am', 'yes, ma'am'. And that understanding of all the different types of cultures that we work with, and being aware, and also, allowing them to..I'm sorry, like when I used to do home visits, and I visit Indian families, I'd take a pair of socks, because they expected me, their home was sacred, right, they expect everyone to enter to take off their shoes. And that's a form of respect. So I knew I had to bring socks, or an extra socks, out of respect for the culture, also being culturally sensitive also"*
Showing Dignity and Respect	CHW4 *"It's important about interactions with men. In the Latino culture, it's important to be aware and around your interactions with men. Being if you're a women. And if you're a man, being respectful I always ask people, how's your family. The first thing when I visit with people. "Hi, it's nice to see you. How's your family?" So something personal is what I'm hearing. So when you're asking someone who may not know very well, asking them 'how's your family?', you've shown that you've taken them time to show them that you care. And you're honoring the Latina culture. In the Latina culture, family is first and foremost above all other things."*
Showing Humility	CHW20 *"So when I talk to them, most of the time, uh, I'll go by my looks, I'll dress down, I won't be like the student type, but not like your office worker. And you know, like, me having to work with teenagers, you know, and having teenagers myself, I have kind of the feel, have to soften up, you know ease the tension between us… you know what I'm saying? It's mainly my appearance that calms young people down."*
Spending Time	CHW8: *"I would say all those things, but I would also say the pause, to let the patient who normally doesn't see the provider and now sees a provider when they're sick. So I suggest that pausing, after asking a question, pausing to let the patient think about what I am going to say just to think about this, just a few more seconds to give them time to answer the question, instead of closing in on*

	the question. One thing I used to do when helping patients, I'd see providers rush through questions, not looking at the patient and how they are answering, all the tiny things that make all the difference. Again, based on my experience, it's all those little things that make the difference, of course there's wanting to, wanting to build that relationship with that patient can built through those little details."
	Response in FG: That pause helps the provider to listen, and as you mentioned, listening is what builds trust with the population.
	"Yes, and I think something that helps is as a technical tool, is what helps providers to build trust on those little details, is training on motivational interviewing, which I've done. I've done some of that with providers, and they say it makes a difference. The training includes how to listen, and that works, and a good skill for them to develop."

Later in the process, I changed the code names to reflect gerunds, following Charmaz' coding process. Figure 6 describes the development of the theoretical codes.

Figure 6.

Theoretical Code Development

Analysis of the three diagrams to identify the relevant codes
that answered my inquiry. The result include eight codes.

Review the code comments for themes

Trust building mechanisms occurred during the
initial encounter and during intervention

Addressing social determinants of health
Embodying mannerisms
Speaking appropriate to age, culture, health literacy
Acknowledging discomfort through locus of control
Allowing for time flexibility

Example of the Development of a Theoretical Code: Embodying Mannerisms

For example, I describe how I arrived at the code, Embodying Mannerisms (Dress, Facial Expression, Posture). Initially, this code was titled Body Language, reflecting twenty CHW comments. The comments were further analyzed to identify the specific body language, described as dress, facial expression, and avoiding postures of dominance. I found that reviewing the framework multiple times and rechecking with my research mentors allowed other perspectives and helped finalize the code name. For example, I changed the code name from Body Language to the more specific code name-Embodying Mannerisms (Dress, Facial Expression, Posture). The code name is also a gerund, aligning with Charmaz's coding procedure. My process in developing this code is summarized in Figure 5.

Figure 7

Development of Theoretical Code Embodying Mannerisms (Dress, Facial Expressions, Posture):
An Example

```
┌─────────────────────────────────────────┐
│  Deeper Analysis of 8 Relevant Focused   │
│  Codes: Theme Body Language Identified   │
└─────────────────────────────────────────┘
                    ↓
┌─────────────────────────────────────────┐
│  Pasted all quotations in a new code     │
│  report for re-analysis titled: Body     │
│  Language. Am I missing something? Does   │
│  this code fit the quotation descriptions?│
│  Should I re-code? Discussion with        │
│  qualitative methodologist (James Smith)  │
└─────────────────────────────────────────┘
                    ↓
┌─────────────────────────────────────────┐
│  Agreement that Body Language is part of  │
│  the Theoretical Framework. Insert into   │
│  Framework. Stepped back to visually      │
│  analyze Framework.                       │
└─────────────────────────────────────────┘
                    ↓
┌─────────────────────────────────────────┐
│  Does Body Language align with            │
│  Charmaz' guidelines of coding using      │
│  gerunds?                                  │
└─────────────────────────────────────────┘
                    ↓
┌─────────────────────────────────────────┐
│  Reworded Body Language to gerund:        │
│  Embodying Mannerisms (Dress, Facial      │
│  Expressions, Posture). Discussion with   │
│  mentors for feedback. What can I do      │
│  differently? What's missing?             │
└─────────────────────────────────────────┘
                    ↓
┌─────────────────────────────────────────┐
│  Add code to theoretical framework.       │
│  Always review with mentors for agreement.│
└─────────────────────────────────────────┘
```

Theoretical Framework Development

The development of the framework begins at initial coding, then progresses through the stages of focused coding, and the incorporation of the focus group quotations into the focused codes, categorization of the focused codes. The critical development of the theoretical

framework began during my analysis of the diagrams of the focused codes. The visual analysis

of a diagram helped to identify which codes were most relevant to answer my question. Once I

identified these codes, I could then return to the quotations for a deeper analysis. I asked myself

these questions: a) which quotations directly answered my inquiry; b) which quotations reflect

trust-building communication during the CHW-MCH encounter; and c) where does trust begin?

Figure 5 diagram summarizes my process.

I then developed a theoretical framework diagram, following Hupcey's (2001) and

Sheppard's (2004) examples of the concept of patient trust in health care. From the theoretical

codes, I revised a framework I had started to develop using Hupcey (2001) and Sheppard's

(2004) conceptual frameworks of patient trust with influencing variables (see page 39 and 40).

My inquiry addressed the barriers identified in Sheppard's framework: Perceptions of

Discrimination, Communication, and Caring. Also, my question focused on the Facilitating

Behaviors that build trust as described in Hupcey's Concept of Trust and Health Care. Both

frameworks lack descriptions of how the providers facilitate patient trust. Because this research

is based in the community, client is the preferred term among community health workers; thus,

my framework will use client instead of patient.

The entire process of the final framework required six revisions that began in November

2020 through May 2021. The memo I wrote while developing the theoretical framework is

presented in Appendix F.

Figure 8
Development of Theoretical Framework

```
┌─────────────────────────────┐
│      474 Comments           │
│      87 Codes               │
└─────────────────────────────┘

┌─────────────────────────────┐
│   Grounded comments         │
│   47 Initial Codes          │
└─────────────────────────────┘

┌─────────────────────────────┐
│   Focused Codes             │
│   (27 Relevant Codes)       │
└─────────────────────────────┘

┌─────────────────────────────┐
│  Categorized Codes for      │
│  Analysis:                  │
│  Attitude, Attribute, Action│
└─────────────────────────────┘

┌─────────────────────────────┐
│  Diagrams for visual        │
│  analysis                   │
└─────────────────────────────┘

┌─────────────────────────────┐
│  Which Codes directly       │
│  answered the question      │
│  during CHW-MCH             │
│  communication? Where does  │
│  trust begin? What is in    │
│  the data?                  │
└─────────────────────────────┘

┌─────────────────────────────┐
│  Trust begins at the        │
│  initial encounter          │
└─────────────────────────────┘

          ┌──────────────┐
          │ Theoretical  │
          │ Codes        │
          └──────────────┘

          ┌──────────────────┐
          │ Theoretical      │
          │ Framework        │
          └──────────────────┘
```

Theoretical Framework: Trust Building Mechanisms during CHW-MCH Encounter

In Figure 9, the codes (shaded in gray) were identified as key components in building

trust with women from low-income, racial/ethnic minority groups who have a historical distrust

of the health care system and are at-risk for adverse maternal child health (MCH) outcomes and

disparities. These key components are the factors that CHWs identify as relevant and essential

for building trust. This framework represents the trust-building pathway that begins at the initial CHW-MCH encounter.

Figure 9. Theoretical Framework of CHW-MCH Trust Building mechanisms

Trust-Building Mechanisms during CHW-MCH Initial Encounter

Rafizadeh, 2021
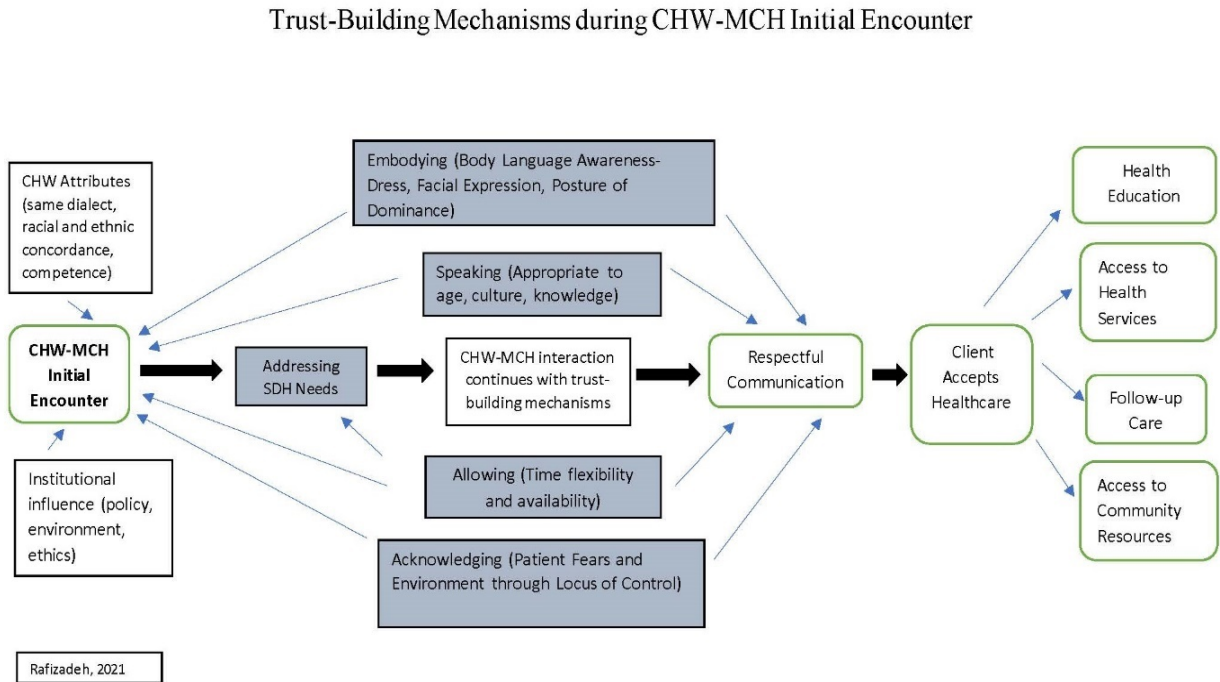
The recurring themes described in the focused codes illustrate that the CHWs were careful about approaching new clients, paying attention to their dress, their mannerisms (e.g., how they spoke), or physical position (dominant versus equal stance). They described that they met at the client's preferred location (client's living or community area). They were also conscious of how they spoke with individuals of different ages or cultural backgrounds. The initial appointment was also centered around the client's availability and time, including unexpected situations during the visit. CHWs had to be prepared and flexible about their time and schedule, as some clients may have immediate SDH needs at the initial meeting. All CHWs indicated that immediate assistance with the client's SDH needs was critical in building trust.

I then compared the recurrences (grounded in the data) of each code between the CHW-

MCH and the CHW-non-MCH groups. I found that 'addressing SDH needs' was dominant among the CHW-MCH group, whereas the other codes were equally represented in both groups' quotation comments. The CHW-MCH groups described that their clients were more likely to present with immediate SDH needs (e.g., food, diapers, housing, or transportation. CHWs described having to put aside their planned agenda and assist the mother to access the necessary services. In providing this immediate assistance, the CHWs began to build trust with their clients, who then understood they would follow through and help to address their most pressing needs. At the same time, the CHWs underscored that further action was needed to continue to build trust before more addressing more complex issues such as harmful health behaviors or adherence to follow-up care or other clinician recommendations.

CHW attributes already known to promote trust with clients during the initial encounter, such as speaking the same dialect language, being of the same race, working, or living in the same community, were excluded from further analysis. Having racial, language, or community concordance does not guarantee that trust will occur between the CHW and the client. CHWs acknowledged that although they were from the same racial/ethnic background, spoke the same language, or lived in the same community; they still struggled to gain trust with some clients.

Theoretical Codes

The theoretical codes that address my inquiry, 'how do CHWs facilitate trust with low-income racial/ethnic minority women at-risk for MCH disparities and with a historical health system distrust are addressing SDH needs, embodying mannerisms and dress (body language), speaking appropriate for client's age, culture, knowledge, (distinguished from spoken dialect and appropriate for client age, culture, and knowledge), easing client fears through the locus of control (context of emotional and environment safety), and allowing for time (time flexibility

and availability). I also reviewed and discussed the emergence of the theoretical codes with another qualitative methodologist; the following sections discuss each of the five theoretical codes along with exemplary quotations from the CHWs.

Addressing Immediate Social Determinants of Health Needs. The CHWs identified MCH needs related to social determinants of health, including food, housing, diapers, other infant and childcare, necessary reading material for the younger children, environmental safety, and transportation. Some CHWs had diapers or transportation vouchers available as needed; however, most CHWs offered clients opportunities to call them or visit to address their specific needs for resources. With the COVID-19 pandemic and the transition to virtual public education, two CHWs described helping women find public computers with Wi-Fi access and trained them to use the computers. Two of the CHWs were housing specialists but described having MCH clients in their caseload who also needed additional transportation, food, and childcare. One CHW mentioned that she had to help some women navigate resources for domestic violence victims-- a situation confirmed as common among CHWs in the focus groups. In addressing the client's immediate SDH needs and providing tangible resources, the CHWs demonstrated interest and concern for the client's family and immediate priorities and thereby began to build trust.

> CHW17 "*I remember working with moms who aren't working because they had little kids, pregnant, or have babies with them, and aren't able to spend time at the school as well. So same thing, always just helping them through those issues that they're having. I think, um, we don't typically serve diapers and things like that, but we do know where to connect them to with our grant because we are working with moms that are breastfeeding. We get to learn where those resources are at,*

as well. So always providing what they need first, before trying to meet the needs for our program."

CHW 14 "With pregnant moms, it really was a lot of social determinants of health and a lot of things done to them…And when, uh, a mom sees that you're really invested in their child, well, okay, so we can start build this relationship, and we have taken formulas, Pampers. We may not have Pampers at the moment, but I'm gonna connect you to the services that can help you through the process and help you a little bit further. I've done that with asthma medication, I've done that with food, I've done that with other needs they have."

CHW6 "And also understanding the circumstances where the people live in, where we listening those needs, addressing those needs, addressing the circumstances that they are, being knowledgeable about the sources that we can help them so we can provide information about those resources.

CHW33 "You kinda leave it up to them instead of what the company's agenda is for the family. But at the end of the day, these families are only going to move if it's worth their while and it's what's important to them. So you go to a mom and say, 'what is important to you right now, today?' So what important is, 'my child needs a school bus that goes door to door because I don't have transportation.' That's what she needs. It might take a week, but she'll go, 'you know what, L. helped me with this, she can help me." you know what I mean? So you know, doing what you can do to develop that repore and seeing what's important to them because it's not our lives, and I've said this before, it's their lives, and you kinda

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have to shape yourself around what they need. You have to respect them, yeah."

Building Trust through Embodying Mannerisms and Dress. The CHW's quotation comments describe body language mannerisms, including posturing and dressing used to build trust, particularly in the first encounter, including facial expression, dress, and posture that CHWs use to build trust. The CHWs paid careful attention to their attire; for instance, a CHW who worked with high school students wore jeans and maybe a sweatshirt to assure students would be more comfortable and inclined to approach them at the school clinic or the hallway. The CHW described respecting clients by not wearing clothing that may intimidate them, such as lab coats worn by healthcare workers. Because CHWs served clients from low-income populations, the lab coat could symbolize the socioeconomic status divide and may leave them uncomfortable at their first encounter. Consequently, the client may be more cautious and less likely to engage in an open conversation because of the lack of trust.

> *CHW8 "And if that respect is based on socioeconomic level, formal education*
>
> *level, the way people dress, the way people present themselves, first presentation,*
>
> *and if there's a lack of respect based on that, based on superficial factors, people*
>
> *sense that and definitely more reluctant to go back and do follow up with that*
>
> *provider. But that respect has got to be there on a human level, human, human.*
>
> *You know, I've spoken with some providers who say that they rather not wear*
>
> *their white jacket, not wear a tie, and dress down so people won't feel intimidated*
>
> *and feel the respect that the provider wants them to feel. The look in the eye, and*
>
> *the provider, I keep focusing on the provider because they're the lead, they're the*

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lead in this relationship."

Another strategy was avoiding postures of dominance. For example, CHWs avoided standing over clients and instead remained seated to stay at eye level with the client throughout their visit. CHWs described sitting more casually at the client's eye level as less intimidating. As a result, CHWs stated that their clients were more likely to engage in conversations that allowed them to develop trust for a therapeutic relationship.

> *CHW16 "So you try to give them the same thing that they are giving you, so you try to read the person and try to give them the same body language that they're giving you. So you're facing them in a chair, you are not really standing over them, and when you're talking to them, you're not standing over the client's head. You're like over them, just look like you're comfortable and you're not in a rush. You don't want to make the person feel rushed."*

> *CHW10 "Yeah, eye contact, definitely. I kinda like the sitting stance, where both are not directly facing each other, but to the side. I think that's a little bit more casual, based on my experience, that's worked really well, not being too direct, you know, being relaxed, like maybe putting my hands on my knee, things like that."*

CHWs communicate with empathy, conveying their respect for the client's choices even though their choices may be counterproductive for the client's health. CHWs encounter clients who may live in circumstances that do not support their health or make choices counter to treatment recommendations. Regardless, CHW must respect the client's preferences, assuming the situation does not pose an immediate threat to the client or their children's health and welfare.

CHWs described that their facial expressions and postures could "give away" their disagreement with client choices. One CHW described having learned how to have a "poker face" to avoid losing the opportunity to build trust with their clients. CHWs had to navigate complicated situations, including adolescent women who do not follow up with screening appointments or women who continue to smoke during pregnancy. As the CHW statement/code, "meeting them where they're at," implies, the CHW proceeds based on the client's willingness and motivation as the starting point for the CHW intended future intervention. Another CHW describes having self-awareness that her initial greeting is open, which invites client response with conversation. By showing this openness with her client, she invited the client to share any problems or issues.

CHW8 " We have to hear them first, then we have to change our voice, of course, the tone of our voice, of course, is important. We told them, "I'm really sorry to hear that something like that happened to you."

CHW25: "You know, reading someone when they walk in, check yourself sometime, greeting, say, 'how you doin?' Greeting them and not just treat them like another patient, like another number. Actually, treat them like a person because you don't know what someone is going through."

Building Trust by Speaking Appropriately to Client's Age, Culture, Knowledge. The CHW's spoken language refers to the contextual meaning of the dialogue with the client versus the dialect of the language. Dialect is the language specific to a race or ethnicity (Oxford Dictionary, 2020), whereas language reflects the meaning of conversations and encounters (Burns, Joyce, & Gollins, 1996). CHW quotation analysis involved reviewing content for meaning and interpretation, including how the CHWs responded to clients who were reluctant to

follow treatment recommendations, perceived discrimination, or had low health literacy. CHWs also spoke about sharing their own experiences with the client, accepting client decisions about proceeding with the recommended care, being aware of their spoken language and choice of words, and avoiding comments that could be perceived as judgmental. As a result, they found their clients were more likely to engage in conversation and disclose the personal information necessary for CHW interventions, including health education, further assistance with SDH needs, or support to access to care in cases where clients resisted or avoided care.

CHWs showed respect by appropriately speaking to clients based on age, culture, and educational level. For example, the CHW's spoken language was contextually different among adolescent women than adult mothers while also accounting for cultural differences. CHWs also respected the client's cultural norms, such as addressing older African Americans formally, using ma'am or sir when speaking with older African Americans. However, they found that communicating with an adolescent African American female was less formal and precipitated more attention to the non-verbal cues, including avoiding dominant posturing. When a CHW met with Hispanic clients, they included other family members present in the conversation, especially for decision-making, consistent with cultural norms. Appropriate speaking mannerisms that show awareness for cultural norms and sensitivity to the clients with respect to age and educational level are essential trust-building mechanisms during all client encounters.

In the following quotations, the CHWs affirmed their client's successes despite the struggle of raising five children while living in poverty. The risks for survival in poverty meant that the client's family was at higher risk of losing shelter, adequate food, and needs related to social determinants of health. The CHW respected the mother's situation with empathy and understanding. Subsequently, the client was more likely to trust the CHW enough to engage in

an open dialogue in response.

CHW19 *"So for me, when I see somebody, I see someone for the first time. I find out that they have children and a little bit about their story. I give their experiences as much credit as someone who's been to college for ten years. You know what I'm saying, so already, if I know somebody who is really struggling with life, and they send me to this person. This person needs all this help; they have five kids, you know, they're living in poverty; my first thing is that I have to understand that this person is way, way smarter than me, and it really matters, and that's their right, okay? I have to give that person the credit they deserve for being able to keeping five kids alive, and I've only been able to keep two kids alive, you know what I'm saying?"*

CHW22 *"You always have to address, to me, with respect. You know, like yes, ma'am, or no ma'am, because the older generation, especially the African Americans, that's what they're used to, you know. So when you go in to see a family and show them that kind of respect, then they're more likely to, like, 'oh, okay,' you know. 'she comes from a good upbringing because she shows a level of respect."*

CHW23 *"You know, as a community health worker, I would kinda, just, um, I would approach it as a cultural aspect, making sure, I would kinda begin, you know, introducing yourself, coming in with kindness, just listening, and just*

asking people their stories. You know, "how's your day?" I typically like to begin

with that. Just because it opens up the dialogue. It allows the person to feel more

comfortable and not invasive; you're not intrusive in any way."

CHW27 "The promotoras don't touch anybody. No touching her, like, some

cultures like Asian, Iranian, Indian, don't like those right? It's our standard, no?

Don't touch the mother, don't touch the baby, don't touch the children. Only smile,

speak slowly, another culture especially, here"

CHW33 "So a lot of empathy or empathizing language is wrapped around that

too. How you say it, and in the tone that you project, and I think that is what

keeps them coming back, and they'll even tell you more stuff that they won't tell

you prior, so for me respect is, whatever they tell you, you take it a face value and

take that overall and work with it."

During the interviews, CHWs made multiple references to modulating the tone of voice

used in the client encounters while being conscious of their age, knowledge level, and culture. In

so doing, the CHWs emphasized the necessity of helping the client feel comfortable. As trust

developed, the CHW described the beginning of open communication to discuss their health

needs further.

CHW29 "And if I have the opportunity, I try to explain them how it works. So, it

depends on many factors. Eh, their age, their education factor, the technology

access, so if I'm aware of all those factors, I can better help them to understand. I

need to be very careful how to 'splain the things. And something that we use,

because we do trainings for promotoras, as well as volunteers, and this is

something that really helps because they want to learn. And they like it, and we

do, we use popular education. So, it's something really helpful. I think, ah, to

know their priorities is very important."

CHW15 "And that's the element of respect, because culturally, right, I know for

Hispanic, right, I am a Hispanic woman, right, my elders like to be addressed one

way, right, and African Americans and also older individuals like to be

addressed, 'ma'am,' 'yes, ma'am. And that understanding of all the different types

of cultures that we work with, and being aware...I'm sorry, like when I used to do

home visits, and I visit Indian families, I'd take a pair of socks because they

expected me, their home was sacred, right, they expect everyone to enter to take

off their shoes. And that's a form of respect. So I knew I had to bring socks, or an

extra socks, out of respect for the culture."

Building Trust by Easing Client Fears through Locus of Control. For various

reasons, including past negative healthcare experiences, clients may be reluctant to enter a clinic

or hospital setting. As a result, clients will cancel or not keep a scheduled appointment. The

CHWs described identifying their clients' specific characteristics for consideration at the first

meeting, including socioeconomic status, race/ethnicity or culture, challenges related to MCH or

health disparities, and previous discrimination experiences. In addressing these considerations,

CHWs would arrange to meet the client at their preferred time and location. Giving control of the

meeting time and location to the client sought to allay preconceived fears, especially if they were

reluctant to meet in a clinic or hospital setting. CHWs stated that meeting their clients in their

preferred familiar environment, such as coffee shops, the client's home, a local park, or the children's school, helped make the client more comfortable and communicative. Pregnant adolescents were often seen in the school-based community clinic, where the CHW programs were based. Community-based CHWs would meet clients at community or school events. Sometimes when providing community health education on diabetes or obesity, a client would not approach the CHW because of fear. A friend might tell the CHW about the person, and the CHW would find a way to approach them without causing suspicion.

> CHW9 "If we create a space, meet the person where they are, they're gonna want to open up, they're gonna feel the confidence in what they know. And what they've live, that's meeting the client where they are."

> CHW24 "Yeah, so when I'm meeting people, I'm going to where they're at. It's a low-income housing, soup kitchen, food banks"

> CHW33 I know the providers want the patients to come to where they are, but maybe some people can't feel too comfortable come into a hospital setting, or come into an office. Sometimes we'll find ourselves out in the community on a bench, or Dunkin Donuts, somewhere public wherever they're comfortable meeting,

Building Trust by Allowing for Time Flexibility. CHWs reported the importance of flexibility and allowing time for unexpected situations during the initial encounter. For example, the CHW might receive a referral to visit a client and have a specific plan; however, they might find that the client may have other questions, needs, or goals. CHWs emphasized the need for

flexibility to address the client's immediate concerns (e.g., childcare, transportation needs) as a means to build trust. This included allowing for an unplanned time before proceeding to the plan and the meeting's original purpose.

Communication between the CHW and client required flexibility of time and allowance for communicating by other means, such as texting from teenage and young adults who are experiencing their first pregnancy. This communication extended beyond typically scheduled meetings, allowing for informal dialogue to develop a therapeutic relationship between CHW and the client. This strategy was particularly beneficial for trust-building with clients who were most likely to have questions that required immediate responses.

When encountering clients who were unwilling to engage with CHWs or participate in recommended interventions, CHWs emphasized the importance of maintaining open communication, particularly if the client's situation changed and the client needed to ask for the CHW's help. Texting with clients was expected, though clients could also communicate with the CHW by email or phone. Allowing clients to contact the CHWs without scheduled appointments was another trust-building strategy -which showed the client the CHW was reliable and responsive. This also required flexible time commitments from the CHWs for random texts requiring an immediate response.

CHWs who worked in programs that focused on community building engaged with community members in their respective neighborhoods. For instance, they attended school functions, community events and shopped in the neighborhood stores. CHWs stated that as community members became familiar with their "face" and "presence," they became more likely to approach them or in situations that required CHW help, indicating that the CHW presence was beneficial for building trust.

CHW5 "So the provider don't have time enough to spend time with the patient. So we provide all kinds of information about mental., family planning, breastfeeding, all questions about pregnancy or what they able to take for pregnancy, or if they have any concern about constipation, or nausea, or any concern, because sometime the patient they have a better relationship with us, than the provider, because we are a bridge between the provider because we are a bridge connection between us, the community health worker."

CHW26 "With moms, like I said, it helps me a lot to show up to be there constantly. So I have not been the person where they see one time, and they don't see me again. I start by being steady participating in activities in the schools. And even going to the shows for their kids, like that, so I can be present for them or their kids. So because I'm older, they start treating me like a grandma. And I love it. And that's what it came out to. The presence, the being there, the showing up every day. So that's when they start confiding in you. So if I think if that went one or two times, I don't think the friendship, it wouldn't have happened. It took me a good year to be there, every day, for them to come forward to me.

CHW35 "It (trust) definitely takes time. Some of them, uh, you know the clients, they like to text, so they'll text you, and that takes time as well. And before COVID, we were seeing them once a week, so we had a pretty good, you know a lot of texts, so that's how we develop trust with them, we're seeing them a lot, and even though we were seeing them, they were texting us throughout the week as

well. So just having those texts in building trust."

CHW8 "I would say all those things, but I would also say the pause, to let the patient who normally doesn't see the provider and now sees a provider when they're sick. So I suggest that pausing, after asking a question, pausing to let the patient think about what I am going to say just to think about this, just a few more seconds to give them time to answer the question, instead of closing in on the question. One thing I used to do when helping patients, I'd see providers rush through questions, not looking at the patient and how they are answering, all the tiny things that make all the difference. Again, based on my experience, it's all those little things that make the difference, of course, there's wanting to, wanting to build that relationship with that patient can built through those little details."

Summary

Building trust with members of at-risk populations requires a multilevel approach with multiple stakeholders in the healthcare system. This study addressed the most basic level of this multilevel approach where trust-building is likely to occur—interpersonal communication with the client, particularly during the initial encounter with a trusted community member, the CHW. The findings supplement known trust-building strategies, such as client-centered care and respectful communication. Specific nuances or mechanisms in building trust consider the client's race/ethnicity, gender, age, health literacy level, and past experiences of perceived negative health encounters related to bias, both implicit or explicit. These mechanisms are essential for building trust among low-income women, come from racial/ethnic minority backgrounds, have a

historical distrust of the healthcare system, and are at risk for MCH disparities.

Chapter Five: Discussion and Implications

Discussion

The theoretical framework developed here supports our understanding of how CHWs build trust with clients with histories of health system mistrust based on socio-economic disadvantage or racial/ethnic discrimination. The framework relies on the clients' perceptions, including their first impression. Essential components that contribute to CHWs building trust include non-verbal communication (body language), respectful communication (addressing the client's culture, age, and knowledge), and client-centered actions (attending to the client's immediate SDH needs, acknowledging client's choices), allowing for a locus of control (easing of client fears regarding emotional and environmental safety), and CHW's time flexibility. These are identified as essential components that contribute to building client trust beginning with the first encounter.

The historical structural racism in healthcare has compounded healthcare system distrust experiences, underscoring the importance of respectful communication with clients with previous experiences with discrimination (Sheppard, Zambrana, & O'Malley, 2004). We expand on existing literature by showing how CHWs develop trust in a variety of populations. Prior work has emphasized the success of CHWs as trusted members of the community who "bridge the gap" between at-risk low-income racial/ethnic clients and the health care system (Friedman et al., 2006). As part of the healthcare system network, the CHWs in this study demonstrate how they "bridge gaps in healthcare" through building trust by conveying respectful communication and client-centered care. Our findings emphasize that clients are treated with respect, are included in their treatment decision-making, and do not perceive being stereotyped due to bias (Tucker, Arthur, Roncoroni, Wall, & Sanchez, 2015). Thus, CHWs build

trusting relationships that can improve client adherence to treatment and, ultimately, improve health outcomes and reduce health disparities.

We expand on conceptual frameworks of health care trust by Hupcey (2001) and Sheppard (2004) by describing how trust is facilitated. In Hupcey's framework, patient trust is identified in the patient pathway from pre-existing perspectives, entering the health care system and interaction with providers, and components that influence the final evaluation of the interaction based on facilitating and inhibiting behaviors. This framework, however, does not identify the specific facilitating behaviors.

Sheppard's (2004) framework describes broad mechanisms that influence patient trust. These mechanisms include institutional factors, physician communication, continuity of care, compassion and caring for the patient, and competence. The current study expands this framework by uncovering the specific mechanisms conveyed during communication with patients that represent caring and compassion. We add respectful communication as an essential component for patient trust, as identified in the literature. Further, the study expand on Hupcey's (2002) and Sheppard's (2004) work to include community settings.

CHWs in this study shared the importance of racial and ethnic concordance with their clients, which allowed them to convey that they understood the bias and discrimination their clients may have experienced. Most of the CHWs in the study had children, helping them build trust with their clients through familiarity and shared experience. Because of these similarities, they understood the social norms of the client's culture and shared experiences about the challenges of being a mother with limited economic means. Although these shared attributes and experiences helped to initiate trust beginning at the first meeting, building trust was found to require additional strategies. The CHWs emphasized that the process was complex, multi-layered

in verbal and non-verbal communication, and ongoing through their relationship with the client.

The CHWs in the current study worked for institutions and organizations that were supportive of their work, as evident by the time flexibility that permitted CHWs to develop relationships with their clients. Examples include meeting clients based on their preference, gaining familiarity by spending extra hours at neighborhood events, and having the freedom and taking the time to earn client trust. Surprisingly, these institutions paid for CHWs' phones allowing them to text with their clients, an additional strategy for open communication and building client trust.

Respectful Communication.

CHWs provided detailed descriptions of how they conveyed respect during their encounters using non-verbal body language and spoken language. Their comments reflected a level of self-awareness regarding how they behaved and spoke to their clients. The CHWs' multi-level approach included understanding the socio-economic dynamic conveyed during the first impression through means such as dress and posture. Although CHWs might share racial/ethnic and/or language concordance with the clients, they often represented institutions or agencies engendered distrust by members of low economic and specific racial/ethnic communities. Thus, CHWs made conscious efforts to avoid wearing clothing that typically represents institutions, such as lab coats, for example, instead wearing casual dress, such as jeans and hoodies, when working with teenage populations. Also, when CHWs described that they avoidance a posture of dominance, such as standing over their clients, they conveyed that they shared an equal standing with the client, further lowering any barriers that may inhibit the open communication that facilitates building trust.

The CHWs also used non-verbal and spoken communication to align with client's

cultural norms, age, and level of education. They possessed a deep understanding of the cultural norms of the communities they served. For example, one CHW knew that she had to bring socks when she entered Eastern Indian homes out of respect for the clients' views of their homes as sacred. Another CHW addressed older African Americans by saying 'ma'am' or 'sir' to mitigate any client's unease or distrust during the first encounter. The CHWs knew that any unintentional message, even non-verbal communication during their encounters could raise communication barriers. The CHWs avoided projecting any judgment through their facial expressions, as well as their verbal communication.

CHWs emphasized the importance of conveying respect. For example, CHWs might speak less formally and more conversationally with younger clients to ease any fear or discomfort. They prepared resources to share based on their understanding of their clients' health literacy without showing the client needed specific health knowledge. Here, the CHW employed trust-building strategies and mechanisms using specific non-verbal and spoken language cues to minimize fear or discomfort from distrust. Once the open communication was established, the CHW could begin a conversation with the client about their specific needs. The CHWs described that they were always prepared with the tangible and intangible resources that facilitate client access to care or assistance because their clients also present with unanticipated needs.

Client-Centered Care.

In this analysis, the CHWs who worked primarily with MCH clients were distinguished from those who worked with other populations by focusing on addressing their client's needs for tangible resources to address the social determinants of health. They addressed these needs by providing guidance or resources to address unmet needs. The guidance included health education or resources referrals. Tangible resources included vouchers or other resources for transportation,

food, housing, household essentials related to infant or child needs- diapers, infant formula or food, laundry detergent, and even children's books. In meeting these needs, the CHWs earned the trust of their clients enough to engage in further conversation to address more pressing health concerns or barriers to healthcare and use, including previous perceived discrimination experiences or lack of health knowledge.

Future research is needed to explore the role of the social determinants of health and ascertain whether addressing tangible support also builds trust in other populations, including clients with mental illness or those experiencing homelessness.

Trust-Building Mechanisms Sustained during Interventions

We find the trust-building mechanisms that are applied during the initial encounter continue throughout CHW interventions. The consistent communication style throughout all CHW-MCH interactions sustains the established trust through consistency. The trusting relationship furthers the intervention plan that CHWs develop with their MCH clients to improve health knowledge, access to care, and social support acceptance. CHWs can share their knowledge and skills to help their clients to navigate a complicated health care system and develop strategies for optimal health care provider communication. By sharing common experiences--such as being a new mother with limited income and resources--CHWs promote trust with clients (Islam et al., 2017). Women in the community may then approach CHWs for assistance, particularly in schools and neighborhood environments.

The CHW's preparation for unplanned encounters and time with their MCH client continued during the intervention through social support during office visits, problem-solving, and resource sharing. For instance, CHWs indicated that clients with minimal social support would be more likely to contact CHWs long after the intervention.

Limitations

Although this study used two data collection methods with a broad representation of CHWs from three United States regions, there are limitations to consider. First, the study findings cannot be transferable to all CHWs. For instance, allowing for client preferences for the location of the first meeting in the community is a strategy that would not transfer to CHWs who work in acute settings.

Second, this study does not include the perceptions of the recipients of CHW care. Client perspectives are needed to confirm whether or not the CHW perceptions are congruent with their clients' experiences.

Third, external factors, including the role of institutions and having CHW-client racial/ethnic concordance were not explored as factors that facilitate client trust. Clients may initially distrust CHWs based on their affiliation with health care systems, depending on the health care systems' reputation and related community perception. Studies have shown that having concordance is a critical factor for building trust (Street, O'Malley, Cooper, & Haidet, 2008).

Strengths.

Despite these limitations, this study has strengths that are worthy of mention. First, this study used two different methods of data collection, interviews and focus groups. By including focus groups, CHWs could clarify further themes identified during the interviews and thereby deepen our understanding of their experience.

Second, the participants were diverse in their representation of client populations in community-based and hospital-based programs and geographic reach. They represented community clinics, federally funded neighborhood programs, high school health centers, birthing

programs, and hospital-based programs serving homeless and chronic disease clients. Despite broad differences in their work environments, their experiences of building trust were quite similar. Accordingly, the findings may be transferrable to CHWs in other community settings and work with different populations.

Third, because most of the CHWs were members of their communities, they shared experiences with their clients. Their comments reflected a deep understanding of the struggles of having low income and being a member of specific racial/ethnic groups. These attributes led to rich data and contributed to our understanding of how trust is built with individuals and communities with which CHWs share experiences. The findings, therefore, extend current knowledge to describe specific trust-building mechanisms employed by CHWs in their work with at-risk populations, including low-income women at risk for maternal child health disparities based on their race/ethnicity or socio-economic status.

Implications

The successful trust-building mechanisms identified by CHWs in this study suggest that trust can be earned. The findings also underscore the vital role of other stakeholders, including health policymakers, including healthcare systems administrators, and healthcare system staff, providers, and ancillary staff. Health policy can address standards of care that include building trust with clients through respectful communication as one fundamental foundation of any treatment plan (Lynn-sMcHale & Deatrick, 2000; Rădoi & Lupu, 2017). Thus, when these policies are upheld in healthcare systems, the needs of women from low-income, racial/ethnic minority groups who have a historical distrust of the health care system and are at-risk for adverse maternal-child health outcomes and disparities are addressed.

Implications for Clinical Practice

This study's findings emphasize the importance of building trust beginning with the first encounter. Providers, hospitals, and clinics may have to consider how clients perceive their organization based on the first impression, perhaps even before the client's first meeting with the provider. Non-verbal communication (embodying specific postures and dress) was a critical mechanism for building trust that may serve hospitals or acute care settings. In this study, time flexibility and giving clients choices through locus of control were essential to building trust. These strategies may not be directly applicable to clinical settings; however, providing clients with a choice of appointment time or clinic location should be extended when feasible.

Implications for Future Research

Future research is urgently needed to address health system mistrust and barriers to health care access. Most CHWs in this study shared racial/ethnic and language concordance with their clients. Accordingly, a larger sample of CHWs to include those without this alignment may contribute to our understanding of building trust's mechanisms, particularly their transferability to other populations and circumstances. Research is also needed to investigate if and how other health professionals can adopt the mechanisms identified here.

Current communication strategies, such as motivational interviewing, are now commonly used by health professionals to improve adherence to treatment and promote behavior change (Hettema & Hendricks, 2010). However, motivational interviewing relies on contextual spoken language to enhance behavior change (Hettema, & Hendricks, 2010), with little reference to the nuances of the body and unspoken language mechanisms. Clients may interpret non-verbal communication as threatening or dominating (e.g., postures of dominance, negative facial expressions) and may be less likely to understand what the provider is trying to convey. Providers can help clients change behavior (Boyer & Lutfey, 2010); however, the extent to

which they are successful depends on building trust. Future studies that examine if the trust-building mechanisms outlined here can support motivational interviewing goals are also needed.

Implications for Provider Education and Related Policy

Health provider training is needed to address respectful communication and accountability. This training is essential for all health care system staff, including providers and ancillary staff, and could help to build trust and thereby reduce health care access barriers. The CHWs participating in this study emphasized the importance and potential benefit of offering communication training to health system providers who interact with clients from diverse racial/ethnic and socio-economic backgrounds. This need is even more pressing with the growth of diverse populations in the United States and the ongoing challenges of meeting the needs of populations who have experienced discrimination on multiple levels. From an organizational perspective, policies are needed to recognize the diversity of clients served and to focus on appropriate, respectful communication respective of the client's socio-demographic status, culture, and health literacy. Such policies can contribute to the foundational components needed to build client trust in healthcare. Ultimately, institutional values that encourage trusting therapeutic relationships reflect the best interest of the clients served (McKnight& Chervany, 2001; Lynn-sMcHale & Deatrick, 2000; Rădoi & Lupu, 2017).

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Appendices

Appendix A

Characteristics of RCTs with CHW in MCH programs

Title, Author, Year	CHW Intervention	Outcomes	Limitations
Randomized Control Trials			
1.Effects of Home Visits by Paraprofessionals and by Nurses: Age 4 Follow-Up Results of a Randomized Trial (Olds, 2004)	**CHW type**: Paraprofessional **RCT design**: 735 women randomized to follow up home visits from pregnancy to age 2). Compared to standard care vs. nurse vs. paraprofessional **Population characteristics:** 85% unmarried, 47% Mexican American, 35% white; 15% black, and 3% American Indian/Asian.	**Fewer subsequent miscarriages** (6.6% vs 12.3%) **Fewer Low Birthweight Infants** (2.8% vs 7.7%). **Mothers and children displayed higher sensitivity and responsiveness toward one another** (standardized score [mean = 100, SD = 10] of 100.92 vs. 98.66)	**Limitations:** ·Did not address contextual differences that compare the nurse interaction with paraprofessional interaction. ·Design may have favored nurse home visit with respect to fewer environmental distractions
2.Home-Visiting Intervention to Improve Child Care Among American Indian Adolescent Mothers (Barlow, 2006)	**CHW type:** Paraprofessional **RCT design:** 41American Indian pregnant adolescents randomized to receive breastfeeding education program vs. standard care **Population characteristics:** Apache and 3 Navajo communities	**Higher parent knowledge scores at** 2 months (adjusted mean difference [AMD], +14.9 [95% confidence interval (CI), +7.5 to +22.4]) and 6 months postpartum (AMD, +15.3 [95% CI, +5.9 to +24.7]). **Higher on maternal involvement** scales at 2 months postpartum (AMD, +1.5 [95% CI, −0.02 to +3.02]), and scores approached significance at 6 months postpartum (AMD, +1.1 [95% CI, −0.06 to +2.2]). **No differences in childcare skills.**	**Limitations:** Low sample size, large dropout rate (original sample was 53), ·Most of the data was self-reported.
3.Addressing Mental Health and Stress in Medicaid-Insured Pregnant Women Using a Nurse-Community Health Worker Home Visiting Team (Roman, 2007) RCT	**CHW type: CHW** **RCT design:** 530 at higher risk Medicaid eligible pregnant women randomized to CHW home visit with nurse vs. standard care (enhanced prenatal program) **Population characteristics:** Majority were single (83%), African American or Hispanic (59%), mean age 22 (31% between 16-19), history of physical abuse (52%), illicit drug use (53%), depressive symptoms (56%)	**Higher number of women with prenatal program contacts** (86% vs. 57%) **More women with high-risk characteristics were reached in the nurse-CHW team group and received services except for women with alcohol and drug use-related risks.**	**Limitations:** Description of CHW characteristics lacks information about race, ethnicity, age, number of years as a CHW, educational experience). ·Lacks contextual descriptions that may have contributed to the significant findings.
4.Home Visiting for Adolescent Mothers: Effects on Parenting, Maternal Life Course, and Primary Care Linkage (Barnet, 2007)	**CHW type:** Trained home visitors **RCT design:** 84 adolescents randomized with a home visitor paired and provided services through the child's second birthday; the services were parenting curriculum, encouragement of contraceptive use, primary care connection and promotion, and promoted school continuation. **Population characteristics:** Pregnant teens ages 12-18, low-income, African American in 2 prenatal care sites in Baltimore	**Parenting scores for home-visited teens were 5.5 points higher than those for control teens** (95% confidence interval, 0.5–10.4 points; P = .03) and higher adjusted odds of **school continuation were (AOL=3.5** (95% confidence interval, 1.1–11.8; P <.05) **Two years follow up, 61% of the intervention group had a regular doctor vs. 44% control group.** **No significant impact on repeat pregnancy, depression, or linkage with primary care.**	**Limitations:** Research design did not indicate what kind of training home visitors received ·Home visitors were not trained on how to use a depression screening scale. ·Lacks info of home visitor age, number of years of previous experience, and specific details of prior experience. ·CHW experience could have biased outcomes as they managed a caseload of 15 high-risk teens also at risk for depression and repeat pregnancies.
5.Infant health effects of	**CHW type:** CHW	**Fewer mothers with low psychosocial**	**Limitations:** Samples of 427

a nurse–community health worker home visitation program: a randomized controlled trial (Meghea, 2012)	**RCT design:** 530 pregnant females randomized to Nurse–CHW home visits. **Population characteristics:** 27% African American, 23.5% Hispanic, 42% White; Age ranged <20 34%, 20-25 46%, >25 19%;	resources reported infant **asthma/wheezing/croup symptoms** (13% vs. 27%, p=0.01; adjusted OR=0.4, p=0.01**). No differences in percentages of immunizations, hospitalizations, and ear infections.**	were in Kent county, and 103 were out of the county, did not specify the differences and how this may have contributed to the significance or non-significant findings; ·Lack of comparison to previous studies; · 80% of the samples were centered in one Michigan county, limiting a generalization of the findings ·CHW had shared cultural background, but the study did not specify racial/ethnicity CHW description; no contextual data to explain significant and non-significant findings; ·Findings of mother outcomes were self-reported
6.Pathways Community Care Coordination in Low Birth Weight Prevention (Redding, 2014)	**CHW type:** CHW known as Community Care Coordinators (CCC) who were trained to identify women who were at risk, connect them to services, and follow-up of service usage **RCT design:** 230 at-risk women matched through propensity scores to enrollment in the Community Health Access Project (CHAP) to improve LBW outcomes. CHAP utilizes CHWs and who also received financial incentives. **Population characteristics:** AA (68%) and White females residing in Richland County, Ohio; 8% < 18; singleton live births between 2001-2004; 29% less than high school education, 23% college educated; 18% married	**Seven infants with Low Birth Weights** (6.1 %) **compared with 15** in comparison group(13.0 %). The adjusted odds ratio for LBW was 0.35 (95 % confidence interval, 0.12–0.96). **Financial savings for each dollar spent on women enrolled in CHAP to avoid Low Birth Weight: the first year of life was $3.36; long-term savings were $5.59. Higher odds ratios adjusted for <16yo, unmarried, African American, smoking, previous low birth weight infant, and having hypertension**	**Limitations:** Sampling limited to one county in Ohio limiting generalizability; ·Lacks comparisons to other at-risk minority groups to expand heterogeneity; ·Small sample size related to population in census tracts; ·The study did not randomize samples subject to limitations of propensity score matching; ·Limited to available data in vital statistics records for identifying samples; ·Birth weight data were limited to birth weight; birth certificate did not include maternal complications

Appendix B: Interview Guide

Interview guide 30-60 min

Introductions and prompts

I will begin the interview by thanking the participant for participating in this interview, followed by a brief description of the study. I will inform the participant that the interview is being audiotaped, then ask the participant if she/he has any questions before I begin the interview.

Questions

Ice breaker questions:

"Tell me a little about yourself and your work as a CHW."

Focused questions: (*These are prompts to begin the discussion. The direction may not follow these prompts, and the questions that follow will depend on what the participants state*)

"Tell me more about your work."

"What is the most common problem that your clients talk about?"

"How do you get your clients to trust you?"

"What do you say or do to help them?"

"Tell me about the clients you work with."

"Among your population, do you work with women, pregnant women, women with young children, women who just gave birth? How do you help them?"

"How do you help someone who may not agree or have a hard time with your suggestions?"

(Depending on their answers, I will expand on a statement that identifies how they build trust. If the CHW is open, I will probe the topic further by asking, "could you tell me more about that?." This may lead to the CHW volunteering examples based on their own experience.)

Ending

"Thank you again for your time and the information that you have given me. I would like to ask you additional questions for this study from the demographic questionnaire. Could you take a few more minutes to answer these brief questions?" When the CHW agreed, I proceeded to ask the questions from the demographic questionnaire, (Appendix C) which I later transcribed. I continued: "I'd like to provide you with this $30.00 gift card to compensate for your time. Let me know how you would like to receive the gift card (Target or Amazon) by email, text, or traditional mail."

Appendix C: Focus Group Guide

Focus group questions (Theoretical sampling for exploration of factors or patterns identified from the interviews)

Time: 45-90 min

Introduction and Welcome.

Script:

"Welcome, everyone. Thank you for taking the time to participate in this focus group. Your participation will contribute to the broader knowledge about CHW work and how you communicate with your clients." This study seeks to find out how you help them find the care they need and support them in continuing with the care.

Questions that are more specific based on the interviews:

I would also like to review concepts that came up during the interviews that need more clarification. The first concept is "meeting them where they're at?" What does this term mean when you are talking with your clients? How does this help you build trust?"

We will begin with a brief introduction. Please take a minute or 2 to tell us your name, where you work, how long you have worked a CHW. I can begin by introducing myself."

Each person will introduce himself/herself

1. Name, number of years worked as a CHW

2. What areas in health care did the CHW work, and which populations served

3. Why he/she became a CHW

Questions that are more specific based on the interviews:

Focus Group Prompt One: "I would also like to review concepts that came up during the interviews that need more clarification. The first concept is "meeting them where they're at?"

What does this term mean when you are talking with your clients? How does this help you build trust?"

Focus Group Prompt Two: "Could you tell me more about how you helped your clients with social determinants of health and how this may help the women to trust your suggestions."

Focus Group Prompt Three: "Could you each tell me about your perspective of what empowerment means to you?"

Focus Group Prompt 4. Based on what emerges from Discussion prompt 3, I will explore and expand here. For example, "Could you tell me more about your experience?"

End: Thank you for your time to participate in this focus group. The information you gave is valuable in this research. I would like to compensate for your time with a $50.00 gift certificate from Target or Amazon.

Appendix D: Community Health Worker Demographic Questionnaire

Demographic Questionnaire (*This research seeks to capture the CHW characteristics to understand better all aspects of the research inquiry. Thank you for providing this information.*)

Current CHW title _____

Past CHW roles

_____

Describe CHW expertise_____

Primary population that you work with_____

Have you worked in healthcare in a different capacity_____

If yes, what was your role_____

Age_____

Marriage status_____

Number of children_____

Age of children_____

Race/Ethnicity_____

Birth city_____

Thank you for participating!

Appendix E: Community Health Worker Informed Consent: Exempt Research

<div align="center">

University of California at Davis
Letter of Information

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Title of study: *Community Health Workers for Establishing Trust with Low-Income Minority Women with Historical Distrust in Health care and at risk for Maternal Child Health disparities*
Investigator: Elbina Rafizadeh PhDc, MSN, RN

Introduction and Purpose
> You are being invited to join a research study. If you agree to participate in this research, you will be asked to

1) **Participate in an interview** either face-to-face or by Zoom conference over the phone and/or internet), The interview will take up to one hour during which time we will ask you questions about your work and how you build trust with the individuals you serve. We will schedule the method and time that best accommodates your time and schedule in a place that assures your privacy. After the interview we will ask you to fill out a short survey asking general questions about you and your work;

   And/Or:

2) **Participate in a focus group** with a small group (5-8) of other CHWs. During the focus group, we will discuss the process of building trust in the community with the individuals you work with. The longer time frame allows exploration of topics that arise during the discussion. We will schedule focus groups at a time that best accommodates your time and schedule in a place that assures your privacy. After the focus group, we will ask you to fill out a short survey asking general questions about you and your work;

Your participation in this research should take about 30-60 minutes for the interview OR up to 75 minutes for the focus group.

When you participate in this research you will be audio recorded. The recording will be transcribed, but your name will not be included on the transcription.

Participation in research is completely voluntary. You are free to decline to take part in the project. You can decline to answer any questions and you can stop taking part in the project at any time. Whether or not you choose to participate, or answer any question, or stop participating in the project, there will be no penalty to you or loss of benefits to which you are otherwise entitled.

Questions
If you have any questions about this research, please feel free to contact the investigator at **831-247-0738** or **erafizadeh@ucdavis.edu**.

Appendix F: Memo for Theoretical Framework Development
Memos for theoretical development

November/December 2020

Draft of grounded theory using a patient pathway. I started to work on a grounded concept and trying to fit in the codes. It looks like the codes represent respectful communication and client centered care—that is already in the literature but does not identify what respectful communication and client centered care looks like. It's interesting how codes organically evolve to confirm concepts in the literature.

Review of data with James Smith, my qualitative methodologist. who suggested that I go back and look more closely—am I missing something? For instance, he gave the example of body language as one code that I might consider. I reviewed the codes from the diagrams again and decided on which codes were most relevant to answer my inquiry and review the comments. Breakthrough, four codes during CHW interactions (regardless of MCH or non-MCH), but what's different with MCH? Social Determinants of Health—further clarified during the focus groups! I have my draft. Of course, body language, spoken language, time, environment.

Spoken language has dialect and content. It's all contextual in regards to intent and purpose, not just communication in the context of dialect. This is exciting!

More review of the codes and working on different ways to develop a pathway.

Draft of grounded theory (12/6/20)

Facilitation of Trust during CHW and MCH encounter
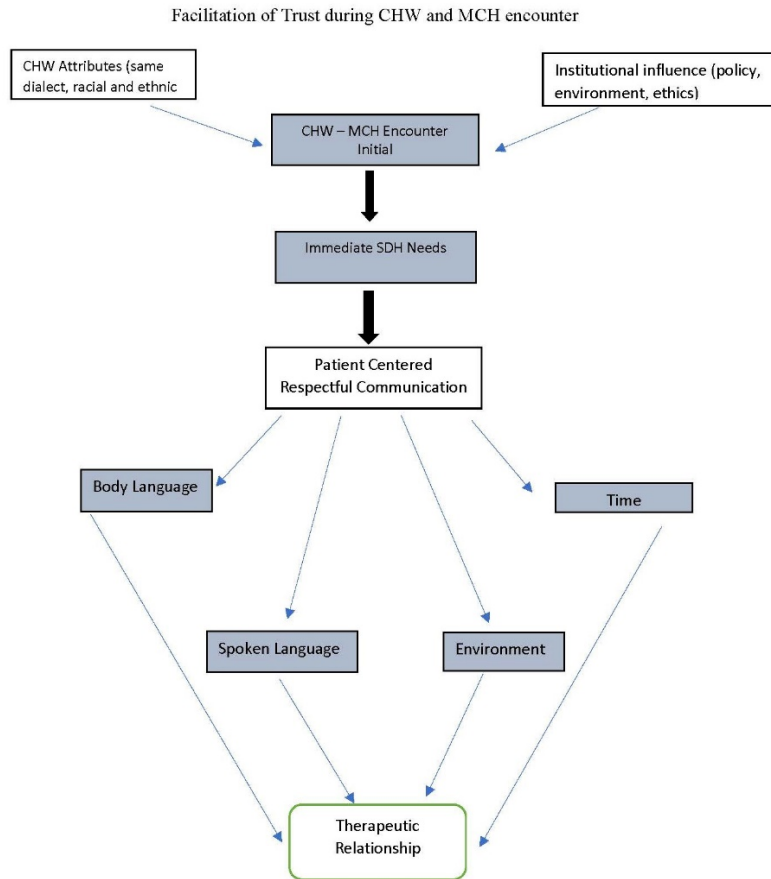
Further review of the concept—still doesn't look right. What does therapeutic relationship mean? And I didn't really go into this in my literature review. So back to the comments. What happens after CHW gains trust. Their roles in service delivery. I came up with the second draft. I've been trying different ways to show this pathway that follows my data.

Building Trust during CHW and Low-Income Minority MCH encounter
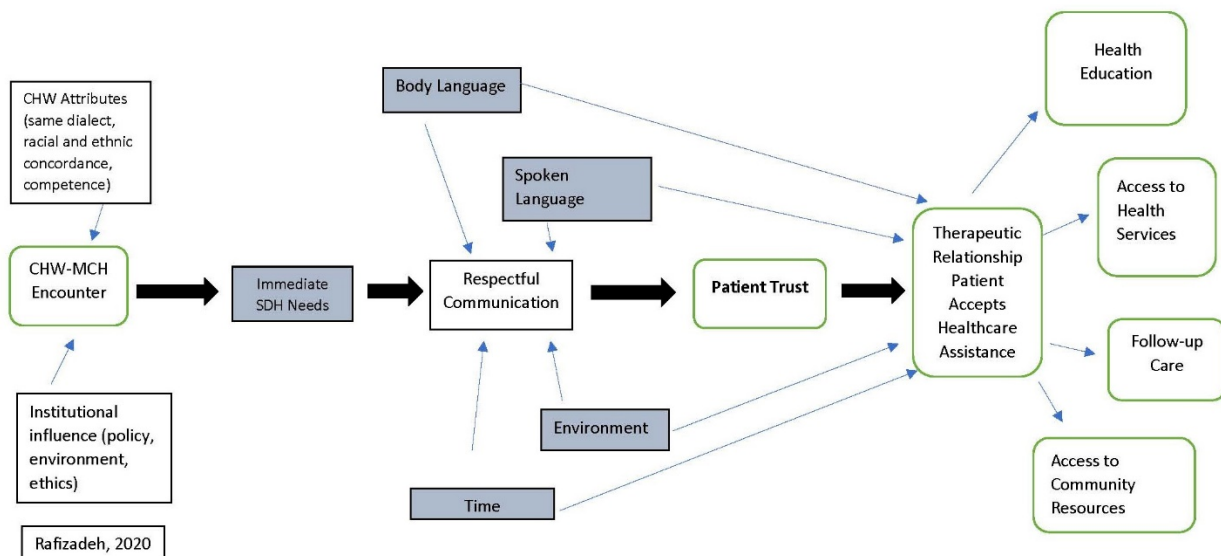
Ongoing review of the framework, and I'm missing patient centered care. Revision and draft 3.

Trust-Building Mechanisms during CHW-MCH Initial Encounter
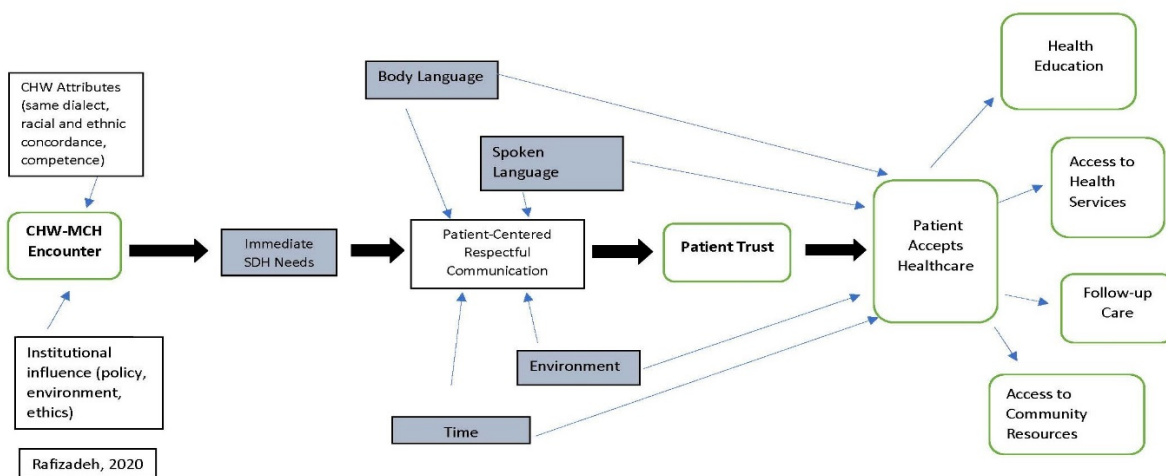
February 2021

This last draft looks adequate, but the theoretical codes are not written in gerunds, as I am using Charmaz' coding guidelines. Janice Bell asked me if the codes should be in gerunds. At first, I didn't think so, but I returned to Charmaz' example and she does use gerunds in her theoretical

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coding. So I revised the coding that was specific to Charmaz' coding. Draft 4:

Trust-Building Mechanisms during CHW-MCH Initial Encounter
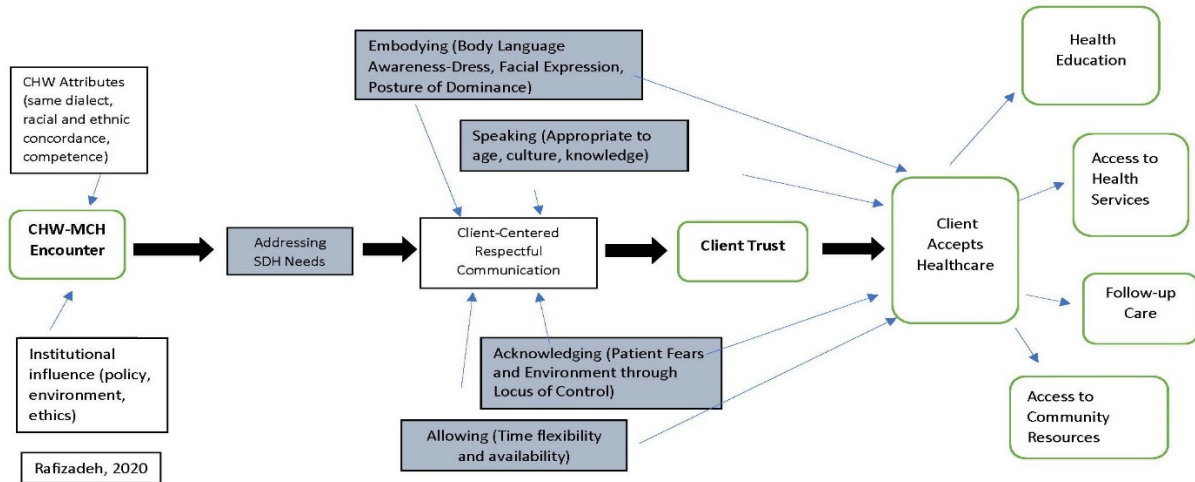
April 2021

Terri Harvath asked me why the theoretical codes didn't point to client trust, as my study focus is on client trust, not client centered- care or respectful communication. Good point. Here I had to step back and ask myself, where do these trust-building mechanisms occur—initial encounter and continues through intervention. So I hope this is the final draft.

I find myself going over this draft and something is missing. I need to read my dissertation again.

Trust-Building Mechanisms during CHW-MCH Initial Encounter
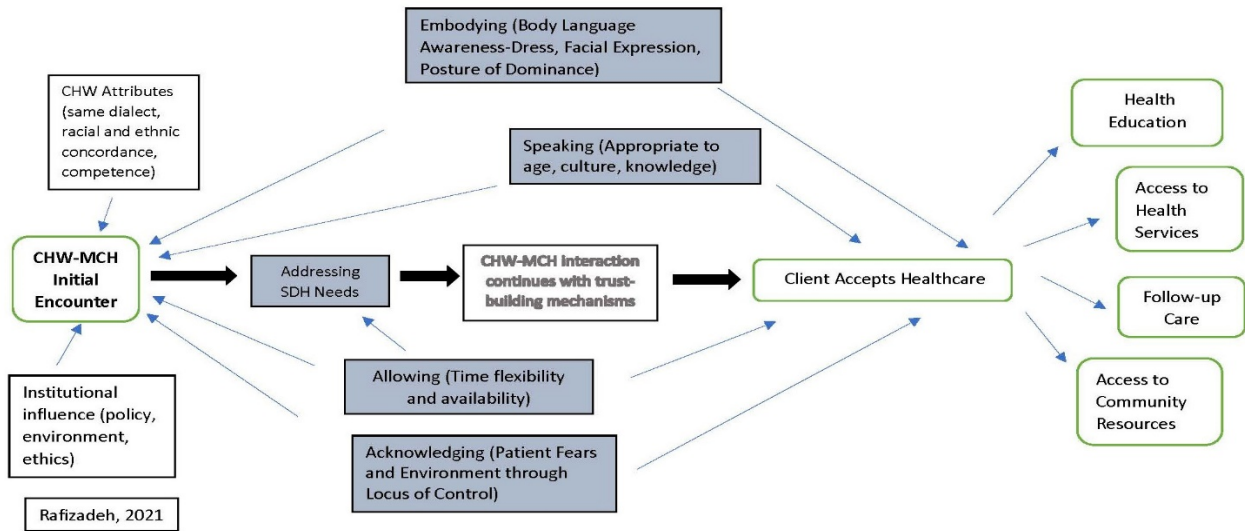
May/June 2021

I reviewed the framework again, and something was still missing. I reviewed the gaps in the literature: gap missing from both Hupcey and Sheppard: Respectful communication—which needs to go back into the pathway. Yes! Finally got it. For now, this is going to have to do, for the Academic symposium and for the dissertation. It may change when I write the paper, but I think this is it, for now.

Trust-Building Mechanisms during CHW-MCH Initial Encounter

CHW Attributes (same dialect, racial and ethnic concordance, competence)

Embodying (Body Language Awareness-Dress, Facial Expression, Posture of Dominance)

Speaking (Appropriate to age, culture, knowledge)

CHW-MCH Initial Encounter

Addressing SDH Needs

CHW-MCH interaction continues with trust-building mechanisms

Respectful Communication

Client Accepts Healthcare

Institutional influence (policy, environment, ethics)

Allowing (Time flexibility and availability)

Acknowledging (Patient Fears and Environment through Locus of Control)

Health Education

Access to Health Services

Follow-up Care

Access to Community Resources

Rafizadeh, 2021