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Exploring how the Perinatal Services of Primary Health Care Settings in Rwanda Support Adolescent Mothers to Inform the Delivery of Trauma- and Violence-Informed Care: An Interpretive Description

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Abstract

According to the recent Rwanda demographic health survey, 5% of adolescents aged 15-19 in Rwanda are pregnant or mothers, with anecdotal data indicating an increase in adolescent pregnancies translating into an increasing need for community support for young mothers in Rwanda. However, adolescent pregnancy is considered deviant and shameful in Rwandan culture, and indeed criminalized, thus young pregnant women and girls are often abandoned by the men who impregnated them, and face rejection from families and friends, stigma from the community, and increased rates of domestic violence. In addition, over half of these pregnancies are the result of rape. All of these factors increase the risk for mental health problems among these young women and girls, including high rates of depression and posttraumatic stress. These trauma experiences may pose additional challenges to young mothers using healthcare services, for example, when perinatal services fail to employ trauma- and violence-informed care (TVIC).

The aim of this study was to explore how perinatal services in primary health care settings in Rwanda support adolescent mothers using interpretive description (ID) methodology. From December 2021 to March 2022, individual interviews were conducted with 15 adolescent mothers, 12 nurses and midwives, 12 maternal community health workers (MCHWs), and seven key informants (heads of health centers and community health officers [CHOs]). Two relevant documents (antenatal care [ANC] and prevent mother to child transmission [PMTCT] guidelines) that guide professional practice in this area were also reviewed.

The findings indicated that adolescent mothers had mixed experiences (tailored care and the re-creation of trauma) when navigating perinatal services. Cross-cutting themes from our interviews with adolescent mothers, nurses, midwives, and MCHWs were relational engagement, personal and structural barriers, and vicarious trauma.

Findings from this study illuminate that there is a need to build perinatal services that are safe, inclusive, welcoming and trauma- and violence- informed for adolescent mothers. Based on the recommendations from this study, a framework to inform the integration of TVIC into perinatal services was created.

Key words: Adolescent mothers, perinatal services, trauma and violence informed care, interpersonal violence, structural violence.

Summary of Lay Audience

Globally, adolescent pregnancies continue to increase, many in developing countries. In Rwanda, in 2020, 5% of adolescents aged 15-19 were pregnant or mothers. According to anecdotal reports, the number has risen in the past three years. It has been found that the majority of these pregnancies (75%) resulted from sexual violence. Due to cultural factors, the Rwandan community does not perceive adolescent pregnancy well, resulting in abandoning adolescent mothers from families and communities. All these factors increase mental health problems among adolescent mothers, including depression and trauma. These trauma experiences may pose additional challenges to young mothers using healthcare services, for example, when perinatal services fail to recognize that these adolescent mothers have trauma histories or are experiencing ongoing violence.

This study aimed to explore how perinatal services support adolescent mothers to resist re-traumatization. Interviews were conducted with 15 adolescent mothers, 12 perinatal nurses and midwives, 12 community health workers in charge of maternal child health, and seven heads of health centers and community health officers. I also reviewed two perinatal guidelines to explore how they influence perinatal practices.

This study found that adolescent mothers have mixed perceptions (positive and negative experiences). The positive experience includes receiving tailored care, while the negative experience has been the re-creation of trauma. Maternal community health workers, perinatal nurses and midwives reported that caring for adolescent mothers is challenging and requires additional skills.

The findings from this study suggest the need to build perinatal safe, welcoming, and inclusive services to support the needs of adolescent mothers; to ensure services are trauma- and violence-informed. The framework to achieve this was created based on the findings from this study.

Co-authorship Statement

This dissertation has been developed in collaboration with my supervisor, Dr. Victoria Smye, and my committee members, Dr. Nadine Wathen, Dr. Panagiota Tryphonopoulos, Prof. David Cechetto, Dr. Kimberly Jackson and Dr. Darius Gishoma. It includes four manuscripts: Chapters Four, Five, Six and Seven. I, Aimable Nkurunziza, conceptualized the idea, framed the research questions, constructed the theoretical background, described existing knowledge, proposed and described the methodology, performed data collection and data analysis, and wrote the manuscript. As co-authors of the manuscripts, my supervisor and committee members provided solid insights and suggestions for revisions, reframed chapters, data analysis and editorial input.

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Chapter One: Introduction

Background

Teenage pregnancy continues to be worrisome in high, middle, and low-income countries. It is estimated that each year, approximately 21 million adolescents between the ages of 15 and 19 in low- and middle-income countries (LMICs) are pregnant, about 50% of these pregnancies being unintended and resulting in an estimated 12 million births (Darroch et al., 2016; Sully et al., 2019). Sub-Saharan African countries (SSA) have the highest prevalence compared to the rest of the world (Ameyaw, 2018; Habitu et al., 2018; Human Rights Watch, 2018; Kaphagawani & Kalipeni, 2017; Omoro et al., 2018; Yakubu & Salisu, 2018). A meta-analysis study has found that East African Community (EAC) accounts for almost a quarter of SSA prevalence (Kassa et al., 2018). In Rwanda, one of the EAC, the recent data shows that the teen pregnancy rate is 5% among adolescent aged between 15-19 years (National Institute of Statistics of Rwanda [NISR] et al., 2020). Statistics indicate an increase in teenage pregnancies, translating into an increasing need for community support for young mothers in Rwanda (United Nations [UN] Women Africa, 2022). It has been shown that unintended pregnancy is correlated with low socioeconomic development, poor access to sexual and reproductive health services, low levels of education, and cultural beliefs (United Nations Population Fund UNFPA, 2018).

Adolescent mothers face unique challenges resulting from social inequities leading to health disparities. They are ostracized by their families, partners and community, and as a result they face financial hardships, making it difficult to find the basic needs and afford health services (Apolot et al., 2020; Govender et al., 2020b, 2020a; Miura et al., 2018; Rukundo et al., 2019). In LMICs, a stigma attached to

adolescent mothers in communities and among healthcare providers is pervasive and has detrimental effects (Crooks et al., 2022). For example, in South Africa, adolescent pregnancy is considered shameful, deviant, and irresponsible impacting how adolescent mothers disclose information and access to antenatal care (ANC) services (Erasmus et al., 2020). Other studies reported a significant prevalence of domestic violence among this particular population (Baran & Gumus, 2017; Belder-preston et al., 2013). Stigma towards adolescent mothers among healthcare providers has been also reported in several studies (Apolot et al., 2020; Bwalya et al., 2018; Erasmus et al., 2020; Govender et al., 2019, 2020b; Henning et al., 2020; Kola et al., 2020; Rukundo et al., 2019; Sewpaul et al., 2021). Having to cope with these challenges puts adolescent mothers at a higher risk of developing mental health problems including trauma, post-traumatic stress disorder (PTSD), and depression.

A growing body of research has revealed the increase prevalence of poor mental health outcomes associated with teen pregnancies (Adanir et al., 2020; Govender et al., 2020b; Osok et al., 2018; Peter et al., 2017), and unwanted pregnancy and getting pregnant at an early age are among the conditions related to trauma (Kimberg, 2019). According to the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5), trauma is defined as when a person is exposed "to actual or threatened death, serious injury, or sexual violence" (American Psychiatric Association, 2013). Poor mental health outcomes such as PTSD, depression, substance abuse, and suicide have been linked to trauma (Green et al., 2016; Katz & Gurtovenko, 2015). In their work done in North Carolina, Killian-farrell et al. (2020) have found that 81% of adolescent mothers had experienced at least one trauma, and three out 4 of them experienced intimate partner violence (IPV). Consequently, these

poor mental health outcomes can interfere with the delivery and uptake of effective care, exacerbating young mothers' difficulties.

Due to trauma and potential histories of trauma, perinatal service users including adolescent mothers may have different experiences related to the environment, procedures, and the systems of care. Montgomery (2013) reports that during labour, survivors of sexual abuse experience loss of control, remembrance of what has happened, feeling vulnerable, the experience of dissociation, and inability to disclose. Also, some midwifery interventions such as the physical vaginal exam may result in re-traumatization (Montgomery et al., 2015). According to Wathen & Varcoe (2019), "Trauma can also result from what does not happen, for example, when systems fail to recognize and intervene in gender-based violence and its related causes and consequences" (p. 3). In light of this, anyone who provides care to these clients must be aware that their trauma history may impact them (Sperlich et al., 2017). However, healthcare professionals may not be aware if their clients have a trauma history or not (Elliott et al., 2005), and re-traumatization can occur (Kezelman, 2016; Seng & Taylor, 2016). For instance, a woman with a history of trauma may perceive a birth process as another traumatic event and be further traumatized from this (Gamble & Creedy, 2009). In perinatal services, women may not disclose the trauma because they fear re-traumatization (Gokhale et al., 2020). Thus, all healthcare professionals working in maternal health should do their best to make these clients feel safe and avoid re-enactment through positive client-staff relationships (Montgomery, 2013; Montgomery et al., 2015). To make the environment welcome and safe to survivors of trauma and those experiencing ongoing violence, healthcare settings should build trauma- and violence-informed care (TVIC) into the organization and practice to

minimize harm and avoid re-traumatization – to provide an equity-oriented approach to healthcare.

According to those researchers in TVIC realm, "TVIC is a universal approach to ensure that all people, especially those who face stigma, racism and other forms of discrimination, are not further harmed in your care" (Wathen & Varcoe, 2021 p.3). TVIC acknowledges the traumatic effects of ongoing violence, including structural violence (Browne et al., 2015) and gender-based violence is considered part of social and structural inequities (Wathen & Varcoe, 2019). TVIC was expanded from trauma-informed care (TIC) to acknowledge that trauma is not solely focused on the individual receiving care; rather, it also includes a focus on the systems and social structures which support structural violence (Ponic et al., 2018; Wathen & Varcoe, 2019); thus the inclusion of the “V” to remind us that violence is a daily experience, i.e., it is not over. TVIC emphasizes that trauma may have resulted from the intersection of structural forms of violence and individual interactions (interpersonal violence) and that groups experience these forms of violence differently dependent on their social location (Browne et al., 2015). Therefore, adopting TVIC approaches in perinatal services would enhance success for service delivery and treatment (Wolf et al., 2014), prevent trauma, and reduce re-traumatization. This practice means that it is not necessary to disclose or know people's experiences of trauma or violence; rather everyone receives respectful, safe care (Wathen & Varcoe, 2021).

Despite the potential benefits of TVIC and related approaches in clinical practice, it is not common in healthcare settings (Kezelman, 2016; Seng & Taylor, 2016), meaning that patients, especially those already marginalized by inequity such as violence, may additionally face institutional violence. Wathen & Varcoe, 2019 defined *institutional violence* as "policies and practices that perpetuate harm (system-

induced trauma) because they are designed to satisfy the needs of the system, rather than those of the person" (p.1). For example, lack of necessary materials, shortage of staff in perinatal services, routine examinations, unnecessary procedures, and poor treatment plans can lead to institutional violence (Brilhante & Jorge, 2020).

Adolescent Mothers' Challenges in the Rwandan Context

The impacts of adolescent pregnancy in Rwanda are often interconnected, multi-dimensional, and compounding thus affecting the outcome of multiple capacities in adolescents (Cressey et al., 2020). The findings of a rapid survey conducted by Collectif des Ligues et Associations de Défense des Droits de l'Homme au Rwanda (CLADHO) across ten districts have shown that the majority (75%) of teenage pregnancies in Rwanda were related to sexual violence (CLADHO, 2016). Despite this, many cases remain unreported due to unequal power relations between men and women and patriarchal social norms that encourage silence. Moreover, within just four years, Rwanda Investigation Bureau (RIB) reported 3.6 times more cases in 2021 than in 2017 (UN Women Africa, 2022). In their recent study, Association de la Jeunesse pour la Promotion des Droits de l'Homme et le Développement (AJPRODHO-JIJUKIRWA) in Rwanda, have found the defilement as the leading cause of teenage pregnancy as expressed by 49% of the study participants (AJPRODHO-JIJUKIRWA, 2020). Due to socio-cultural factors, these teen mothers are stigmatized and traumatized by their peers, family members, and the entire community (Coast et al., 2021; Cressey et al., 2020; Isimbi & Umutoni, 2017; Rwandan Men Resource Center [RWAMREC], 2019). Further, the issue of criminalization adds more challenges to adolescent mothers' lives. According to the Rwanda Penal Code of 2018, sexual contact with a child under 18 is subject to deterrents or punishments regardless of whether the child consents. Whenever child

defilement occurs on a child under fourteen years, life imprisonment is the penalty that any circumstances cannot mitigate (Official Gazette No. Special of 27/09/2018, 2018). Hence, the men who got the adolescents pregnant either deny the pregnancy or disappear or abandon them after getting them pregnant. Due to this, adolescent mothers have difficulty getting financial support from both their partners and families (AJPRODHO-JIJUKIRWA, 2020; RWAMREC, 2019). Adolescent mothers sometimes choose not to report the rapist or partners, hoping to get financial support from them (Cressey et al., 2020; Ruzibiza, 2020). Consequently, due to the above mentioned challenges, these adolescent mothers develop mental health problems post trauma. It was found in one study that 48% of adolescent mothers in Rwanda are depressed (Niyonsenga & Mutabaruka, 2020). These challenges shape how adolescent mothers access and utilize perinatal services.

Despite the potential histories of trauma and ongoing violence among adolescent mothers in Rwanda, perinatal services may traumatize or re-traumatize them if practices and policies are not trauma- and violence- informed. Unfortunately, several instances of disrespectful maternity care have been reported in Rwandan perinatal services (Miller et al., 2021; Mukamurigo et al., 2017; Rosen et al., 2015). Other institutional factors can affect the teen mother psychologically, particularly if she was sexually violated. For example, at the ante-natal clinic (ANC) first visit in Rwanda, the client is requested to bring her husband or proof that he is working outside of Kigali to get the services and tested for HIV/AIDS (Hagey et al., 2014); this can sometimes be a long process or even re-traumatize the adolescent mother. Also, only 14% of nurses and midwives working in ANC have demonstrated that they could take care of a client with a history of sexual violence (Rurangirwa et al., 2018). Thus, there is a need to establish trauma- and violence-informed perinatal services to

address these challenges. Despite the unique challenges adolescent mothers face and the effect of the above-mentioned practices, the literature which explored how adolescent mothers navigate perinatal services in Rwanda is scarce. Therefore, this study used an interpretive description methodology to explore how perinatal services support adolescent mothers to inform the delivery of trauma- and violence-informed care in primary healthcare settings in Rwanda.

Study Purpose and Research Questions

In this study, I explored how perinatal services support adolescent mothers to inform the delivery of trauma- and violence-informed care in primary healthcare settings in Rwanda.

Research questions were:

1) What are adolescent mothers' experiences accessing perinatal services in primary health care settings in Rwanda?
2) What are the maternal community health workers' experiences caring for adolescent mothers in the perinatal period in Rwandan communities?
3) What are the nurses’ and midwives' experiences when connecting with adolescent mothers in the perinatal period in primary health care settings in Rwanda?
4) How might trauma- and violence-informed approaches be incorporated into primary health care settings in Rwanda in a culturally safe way?

Declaration of Self

This study utilized an interpretive description (ID) approach. According to Thorne (2016), in ID, as in other qualitative approaches, the researcher is explicitly

considered an instrument. Consequently, the researcher enters the field with personal assumptions and preconceived ideas. They can influence the research process either positively or negatively. The latter should be avoided by engaging with ongoing reflexivity.

My interest in adolescent reproductive health has roots in my background as a registered pediatric nurse, nurse educator, principal investigator of a reproductive health project, and a program lead in a reproductive health and research project in Rwanda. I started my career working as a registered nurse ten years ago and worked in a nursing and midwifery school as a nurse educator, with roles and responsibilities in clinical instruction in different clinical and community settings. During this period, I was exposed to how perinatal services are offered to adolescent mothers and how nurses feel when caring for adolescent mothers. My subsequent pediatric nursing specialization gave me the opportunity to work with adolescent mothers and listen to their concerns. This led to my master's research interest focused on adolescent sexual and reproductive health, which I was at that time unable to pursue.

I was later awarded funding for a project entitled "Breaking barriers in the prevention of adolescent pregnancies for in-school children in Kirehe district (Rwanda): the development of a peer education program on sexual and reproductive health." I worked with adolescents and had the opportunity to explore their perceptions and utilization of healthcare services. However, this project's purpose was not to work specifically with adolescent mothers, but with adolescents in general. The qualitative research part of the project enlightened me on how adolescents may experience health services utilization due to different factors such as stigma in society and healthcare settings. Thus, after realizing how the issue is among the general population, my interest in adolescent mothers emerged.

I held a position as a program lead of sexual and reproductive health and research in Eagle Research Center in Rwanda, which had the responsibilities of working on family planning and comprehensive abortion care. There was a part of this work that focused on research and community outreach. Through this position, I came to witness how adolescent mothers struggle to access and utilize perinatal services.

The interpretive description researcher may be an insider or outsider in data collection (Thorne, 2016). In the proposed study, I did not interview participants I was familiar with and was unfamiliar with the settings. Thus, I consider myself as an outsider. It has implications on entering the field since it takes time for the researcher to build relationships with study participants, gain contextual information, and gain the people's trust in the research setting. Thorne (2016) provided an example that, sometimes, researchers are seen as setting out to expose unhidden poor practices making entry in the field challenging. Thus, I overcame the challenges mentioned above associated with being an outsider by building a strong relationship with those working in the research setting (i.e., potential study participants). I reinforced with daily self-reflection and writing down memos before data collection. I also reviewed them regularly to identify where influences could occur during data collection and analysis.

Dissertation Overview: Integrated Article Format

This dissertation is divided into seven independent chapters. Chapter 1 is the introduction of the dissertation and comprises the study's background, which provides an overview of the context of the topic under discussion. The purpose of the study, and the research questions are also provided. In Chapter 2, I discuss the existing literature related to the research topic. Chapter 3 is the methodological section. In

Chapter 3, I describe constructivism as a philosophical standpoint which guided this study and the ID approach and methods.

Chapter 4, 5, 6, and 7 are the manuscripts of the dissertation. Chapter four is a findings chapter entitled, *An Exploration of the Experiences of Adolescent Mothers Accessing Perinatal Services in Rwanda to Inform the Delivery of Trauma- and Violence-Informed Care: A Double-edged Sword.* Chapter five is another findings chapter entitled, *"…It is challenging and time consuming…": Exploring the Experiences of Nurses, and Midwives Caring for Adolescent Mothers in the Perinatal Period in Primary Health Care Settings in Rwanda.* Chapter six is the last findings chapter entitled, *"…Our duties are almost similar to that of soldiers; we do whatever we can and help them…": Maternal Community Health Workers' Experiences Working with Adolescent Mothers in Rwandan Communities.* Lastly, in chapter seven, I provide a framework to integrate TVIC into perinatal services which was developed based on the findings of this study.

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Chapter Two: Literature Review

Introduction

In this chapter I describe the existing knowledge about perinatal services practices to inform the delivery of trauma- and violence- informed care (TVIC). A narrative approach was adopted to describe the existing knowledge and identify the gaps (Byrne, 2016; Paré et al., 2015). Using narrative reviews is an effective way to summarize and make sense of a growing body of research that promotes the use of evidence-based practices (Smith & Noble, 2016). The goal of narrative reviews is to evaluate previous studies, identify knowledge gaps, and make recommendations for future research (Ferrari, 2015). Generally, narrative reviews provide comprehensive coverage of a topic, addressing several issues at once (Collins & Fauser, 2005). A review was conducted through the Cumulative Index to Nursing & Allied Health Literature (CINAHL), Scopus, Proquest, PubMed, PsycINFO, and grey literature. Keywords were: trauma, trauma-informed care, trauma-informed approach, violence, trauma- and violence-informed care, structural violence, adolescent mothers, teenage pregnancy, teen mothers, pregnant teen, young women, young mothers, childhood sexual abuse, sexual violence, adversity, perinatal services, antenatal care, prenatal care, maternity care, and Rwanda. The Boolean combination was used to exhaust the search and find the relevant articles. Only published articles between 2010 and 2022 were analyzed to inform the literature. The decision for this timeframe was made according to when trauma-informed care started to evolve in healthcare practices (Blanch, 2012). However, due to the history of some foundational concepts, older articles also were considered. The refinement of the search was used to have limited and relevant articles with the Boolean combination.

Trauma and Violence

Trauma continues to be a leading cause of morbidity and mortality and traumatic experiences hinder one's ability to adapt to fluctuations and stresses of life (Kimberg, 2019). There is no universal definition of trauma, and some experts use their own clinical experiences to define trauma (Menschner & Maul, 2016). Trauma may be defined as either individual or complex. Individual trauma "results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional, or spiritual well-being" (SAMHSA, 2014 p. 7). Complex trauma or complex psychological trauma is defined as "resulting from exposure to severe stressors that (1) are repetitive or prolonged, (2) involve harm or abandonment by caregivers or other ostensibly responsible adults, and (3) occur at developmentally vulnerable times in the victims' life, such as early childhood" (Courtois & Ford, 2009 p.13). According to the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5), trauma is defined as when an individual person is exposed "to actual or threatened death, serious injury, or sexual violence" (American Psychiatric Association, 2013 p. 271).

Prevalence of trauma and violence, as well as their impacts on individuals' health have been studied (Deshpande et al., 2017; Herbell et al., 2020; Muskett, 2014). Interpersonal violence is a global challenge (Abramsky et al., 2011) and globally 20% of adolescents girls are sexually abused (WHO, 2020). Poor mental health outcomes such as PTSD, depression, substance abuse, and suicide have been linked to trauma (Green, Dass-brailsford, et al., 2016; Katz & Gurtovenko, 2015). According to Wathen & Varcoe (2019), " trauma can also result from what does not happen, for example, when systems fail to recognize and intervene in gender-based violence and

its related causes and consequences" (p. 3). However, despite these empirical studies around the impacts of trauma, healthcare staff may fail to recognize trauma (Elliott et al., 2005). In its recent project entitled, *Trauma- and violence-informed care toolkit for reducing stigma related to sexually transmitted and blood-borne infections*, the Canadian Public Health Association & Centre for Sexuality (2020) states that "it is essential for health and social service organizations to be aware of how stigma and trauma can affect how clients access and experience health and social services and to provide respectful, sensitive and inclusive care" (p. 4). When institutions' policies and practices harm the clients they are supposed to protect, it is a form of violence (Wathen & Varcoe, 2019). In addition, there is a need for considering the socio-culture contexts of trauma (Kirmayer et al., 2007) because trauma responses vary across western and non-western cultures (Suarez, 2016).

Trauma and Violence among Adolescent Mothers

Globally, it is estimated that >16 million girls aged between 14-19 gave birth (United Nations Population Fund [UNFPA], 2015). In addition, it is estimated that each year, approximately 21 million adolescents between the ages of 15 and 19 in low- and middle-income countries (LMICs) are pregnant, about 50% of these pregnancies being unintended and resulting in an estimated 12 million births (Darroch et al., 2016; Sully et al., 2019). A plethora of research revealed that teenage pregnancy continues to be a public health issue in Sub-Saharan Africa (SSA) countries compared to other parts of the world (Ameyaw, 2018; Habitu et al., 2018; Human Rights Watch, 2018; Kaphagawani & Kalipeni, 2017; Omoro et al., 2018; Yakubu & Salisu, 2018), and East-African Communities (EAC) have the highest prevalence of 21.5% (Kassa et al., 2018). Even though in Rwanda the recent data (2020) indicate that the teen pregnancy rate has dropped since 2015 from 7.3% to 5% (National Institute of

Statistics of Rwanda et al., 2020), this is not an insignificant number and social stigma, family and community rejections, solitude and isolation (Ruzibiza, 2020) and abandonment during pregnancy and/or after delivery (Miura et al., 2018) remain particular challenges. Adolescent mothers experience difficult times during and after pregnancy (Chemutai et al., 2020; Raj & Boehmer, 2013), which can lead to trauma.

Killian-farrell, Rizo, Lombardi, Meltzer-brody, & Bledsoe (2020) have found that the majority of 210 adolescent mothers in their study (81%) had experienced at least one trauma, and three out 4 of them experienced IPV; sexual trauma, loss of a family member, emotional adversity, and poly-traumatization were the prevalent trauma types. In addition, other studies reported a significant prevalence of domestic violence (Baran & Gumus, 2017; Belder-preston et al., 2013). A number of traumatic events increase during adolescent pregnancy and there also is a risk of psychiatric impairment and other stressful situations (Finkelhor et al., 2015; Ford et al., 2011; Hickman et al., 2012). Other studies have found that between 20.1-66.7% of pregnant adolescents experience a history of sexual abuse while 20.6-31.9% reported physical abuse (King & Wert, 2017; Restrepo et al., 2017). Consequently, adolescent mothers develop mental health problems such as PTSD and depression compared to their peers who are not mothers or to adult mothers (Clare & Yeh, 2012; Kingston et al., 2012). Trauma leaves long lasting consequences to victims themselves and their offspring. In addition, an abused adolescent can harm others and pass the trauma from generation to generation (WHO, 2020; Seng et al., 2013; Smith, Cross, Winkler, Jovanovic, & Bradley, 2014), which has negative implications for adolescents' babies.

Although childbearing experiences such as traumatic events have been studied among women, there is a need to investigate these experiences in adolescent mothers as a vulnerable group who tend to experience different types of trauma and violence

immediately after getting pregnant. To create trauma- and violence- informed perinatal services for adolescent mothers requires a deep understanding of trauma and violence and their impacts among this population group.

From TIC to TVIC: Why Violence Matters

Literature highlights the importance of trauma-informed health services among nurses (Kassam-adams et al., 2015; Muskett, 2014; Stokes et al., 2017). Trauma-informed care (TIC) emerged in the literature over the past 20 years. SAMHSA (2014) defines TIC as the approach based on four assumptions and six fundamental principles. Those assumptions are utilized in the definition that "a program, organization, or system that is trauma-informed *realizes* the widespread impact of trauma and understands potential paths for recovery; *recognizes* the signs and symptoms of trauma in clients, families, staff, and others involved with the system; and *responds* by fully integrating knowledge about trauma into policies, procedures, and practices, and seeks to *resist re-traumatization*" (p. 9). The six principles are safety, trustworthiness and transparency; peer support; collaboration and mutuality; empowerment, voice and choice; and cultural, historical, and gender issues. However, considering the major themes found in the literature by Hopper et al. (2010), such as relationships between traumatic experiences with symptoms and behaviors, safety, sense of control, and acknowledging strengths of individuals rather than weaknesses, they redefined the definition. "Trauma-Informed Care is a strengths-based framework that is grounded in an understanding of, and responsiveness to, the impact of trauma that emphasizes physical, psychological, and emotional safety for both providers and survivors, and that creates opportunities for survivors to rebuild a sense of control and empowerment" (Hopper et al., 2010 p. 82).

While trauma-informed approaches have been given importance to be incorporated into practice in several areas such as intellectual disabilities (Keesler, 2014), education (Bird et al., 2020; Dorado et al., 2016), social policy (Bowen & Murshid, 2016), dental care (Raja et al., 2015), sports activities (D'Andrea et al., 2013) and obesity prevention (Mason et al., 2016), little is known about its relevance to perinatal services at primary healthcare settings to benefit adolescent mothers. Although their researches were not targeting adolescents, several studies have shown the importance of trauma-informed perinatal services (Choi & Seng, 2015; J. Seng & Taylor, 2016; Mickey Sperlich et al., 2017).

TIC has some limitations, and some essential critiques have been raised. For example, Browne et al., (2015) note that trauma is not well-defined because the focus tends to be on interpersonal violence and the importance of attending to trauma in medical environments, ignoring other essential services such as social, economic, legal, and educational services. In addition, the effects of trauma tend to be thought of as distributed equally. However, due to structural inequalities and their social locations, some groups experience trauma more than others (Browne et al., 2015). Because of these limitations, several authors have pointed to the importance of the inclusion of "V" for violence in TIC (e.g., Ponic et al., 2018). A trauma- and violence-informed care (TVIC) lens acknowledges the traumatic effects of ongoing violence, including structural violence (Browne et al., 2015). Also, gender-based violence is included as a social and structural inequity (Wathen & Varcoe, 2019). In addition, TVIC reminds us that trauma may have resulted from structural forms of violence and/or interpersonal violence and that various groups experience these forms of violence differently dependent on their social location/context (Browne et al., 2015).

Educating service providers should take into account how people's everyday negative experiences of systems and care have resulted from a lack of system, organizational, and provider awareness; individual social determinants of health; and structural inequities, including discrimination (Wathen & Varcoe, 2019). Universal precautions should play an important role in practice with particular attention to vulnerable individuals with historical or ongoing trauma/violence histories to ensure that they are not re-traumatized (Wathen & Varcoe, 2019). Thus, TVIC is built on the following principles: 1) understand trauma, violence and its impacts on someone's life and behavior; 2) create emotionally and physically safe environments for all clients and service providers; 3) foster opportunities for choice, collaboration, and connection; and 4) use a strengths-based and capacity building to support clients (Ponic et al., 2018). For making policies and practices safe, TVIC emphasizes that there needs to be an understanding of trauma and ongoing violence among individuals and communities (Ponic et al., 2018) and the intersection of interpersonal and structural forms of violence (Browne et al., 2015). According to Befus, Kumodzi, Schminkey, & Ivany, (2019) "When the structural violence experienced by both clients and staff is addressed by ongoing processes, TIC truly becomes TVIC" (p.202). Clients' perspectives should be considered prior to the implementation of any trauma-informed approach (Bryson et al., 2017). However, no empirical research has been conducted to assess the importance of and need for TVIC in perinatal services for teen mothers who might have experienced trauma and could be re-traumatized.

Structural Violence

Structural violence was conceptualized early in the 1960s as a kind of injustice that is embedded in social structures (economic, political, legal, religious, and cultural), which prevents individuals, groups, and communities from achieving their

full potential (Galtung, 1969). In addition, Galtung stated that the word violence needs to be understood as "being done physically and [as something which] leaves marks not only on the human body but also on the mind and the spirit" (Galtung, 1990 p. 294). Other authors such as Kohler & Alcock (1976) have conceptualized structural violence as a social structure that, instead of protecting people, causes pain, harm, and death.

In healthcare practice, different authors have conceptualized structural violence differently, but all have pointed out how it is embedded in social structures. Browne et al. (2015) and Montesanti & Thurston (2015) report that structural violence results from how institutions and policies are organized and how they can negatively impact some individuals. In healthcare settings, these people may include both trauma survivors and those who are still experiencing violence. Anthropologist Paul Farmer and colleagues have argued unequal access to healthcare, education, resources, political power, and legal standing as few examples of structural violence (Farmer et al., 2006). In the context of TVIC, structural violence includes any form of systemic violence such poverty, discrimination, and other social inequities (Browne et al., 2015; Montesanti & Thurston, 2015). Structural violence has manifestations that are visible and invisible. For example, visible forms of structural violence could include acute poverty, lack of infrastructure, and physical conflicts; while invisible violence is related to insidious discrimination such as political exclusion and social inequality (Okeke-ogbuafor et al., 2018). In their study on the causes of structural violence, Okeke-ogbuafor et al., (2018) found that they are rooted in or outside of the community.

Structural violence in healthcare services utilization manifests as a form of discrimination, which acts as a barrier to healthcare seeking, forced-choice, and

limited health information (Basnyat, 2017). Generally, structural violence is manifested in perinatal services when women do not receive care and face privacy violations as a result of a power imbalance between them and their healthcare providers with physical and psychological consequences for the women (Marrero & Brüggemann, 2018; Miltenburg et al., 2018). In addition, sometimes healthcare providers do not see how performing procedures in perinatal services without consent is a form of violence, which is a form of institutional violence (Marrero & Brüggemann, 2018). Institutional violence is defined as "policies and practices that perpetuate harm (system-induced trauma) because they are designed to satisfy the needs of the system, rather than those of the person" (Wathen & Varcoe, 2019 p.1). Given how structural violence impacts clients in healthcare services utilization, there is a need to shift from TIC to TVIC.

Intersection of TVIC and Perinatal Services

An organization may work with a TVIC lens without being aware (Canadian Public Health Association & Centre for Sexuality, 2020). However, still introducing TVIC in organizations benefits patients, staff, and organizations. Globally, 20% of women have a history of child maltreatment (WHO, 2020). Childhood sexual abuse and PTSD started to be taken into consideration in midwifery in 1992 (Sperlich, 2015). Unwanted pregnancy and becoming pregnant at an early age are among the conditions related to trauma (Kimberg, 2019).

Perinatal environments may not be safe and welcoming to vulnerable women. For example, a metasynthesis of qualitative studies of labor experiences of survivors of sexual abuse identified six themes; a sense of control, remembrance of what has happened, feeling vulnerable, the experience of dissociation, the inability to disclose,

and hope to heal (Montgomery, 2013). During the perinatal period, clinical procedures can elicit memories of previous experiences and lead to fright-fight-flight mechanisms (Garrant, 2011). Other things that can cause this include sights, smells, sounds, waiting times, invasive procedures, being undressed, the power imbalance between the client and healthcare staff, and using physical restraints (Kimberg, 2019). Childbearing women have revealed that healthcare providers prioritize their own needs over their patient's, sometimes childbearing women become learning resources for staff, their knowledge about labor progress is ignored in front of health care providers, and healthcare providers lie to them so that they comply with the procedures (Reed et al., 2017). In addition, clients with sexual abuse histories are less likely to visit healthcare settings to avoid some routine gynecological examinations (Munro, 2015; Santaularia et al., 2014). These inflexible attitudes and systems shape the future decision of the client of where to birth, and women reported choosing to birth at home rather than the hospital (Keedle et al., 2015). Other interventions such as enforced reproductive health services have been reported in different studies and they undermine trust and discourage women from seeking reproductive health services (Bakare & Gentz, 2020; Ko, 2020; Leason, 2021; Stote, 2022). Thus, all healthcare professionals working in maternity should do their best to make perinatal women feel safe and avoid re-enactment through positive client-staff relationships (Montgomery, 2013; Montgomery et al., 2015).

Even though the literature shows the relevance of TVIC in perinatal services, low- and middle-income settings have higher incidences of child maltreatment, PTSD, and adversity and disadvantaged women in these settings have fewer chances to recover and experience more exposure. This highlights the need to screen for trauma histories, adverse childhood exposures, and PTSD to provide care to women and

identify their needs (Sperlich et al., 2017), which should be done using a TVIC lens. A challenge is that healthcare providers in maternity cannot intervene unless they are aware of the woman's needs, and woman often do not disclose until they feel they can get help from competent healthcare workers (Seng et al., 2008).

Staff training on trauma-informed practices is a top priority when an organization needs to change and work through the trauma-informed lens (Purtle, 2020). The primary purpose of this training is to provide staff the awareness of the prevalence of trauma and its impact on the clients they serve. In their study, Levine, Varcoe, & Browne (2020) discussed the impact of providing TVIC training on individuals and organizations. First, the training improved staff knowledge, awareness, and confidence in providing care to clients with trauma histories and experiencing violence. Second, it changed healthcare providers' discussions from multi-disciplinary level to interprofessional collaboration. Third, it helped healthcare providers to deal with dilemmas in practice and builds structural competence. Over the past ten years, training using TIC principles have been conducted in developed countries (Bartlett et al., 2016; S. Brown, Baker, & Wilcox, 2012; Choi & Seng, 2015; Conners-burrow et al., 2013; Dorado et al., 2016; Goetz & Taylor-Trujillo, 2012; Green, Saunders, et al., 2016; Green et al., 2015; Greenwald et al., 2012; Kenny, Vazquez, Long, & Thompson, 2017; Lang, Campbell, Shanley, Crusto, & Connell, 2016; Lotzin et al., 2018; Madan, Hospital, Danielson, Hanson, & Herbert, 2011; Raja et al., 2015; Strait & Bolman, 2017; Weiss et al., 2017). All these pieces of training were not incorporating the concept of structural violence before implementation. In addition, the literature about TVIC training is scarce.

In lower- and middle-income countries (LMICs), trauma care is not a new concept. For example, a systematic review has revealed that trauma care is

incorporated into different systems, and it is found to be effective to manage clients with trauma history (Reynolds et al., 2017). However, in that review, it was noted that several countries have not published any reports with regards to the way they integrate trauma care in different services (Reynolds et al., 2017). The TIC concept seems to be new in LMICs. In Africa, it is documented that only South Africa had developed a trauma-informed intervention for women for substance abuse and sexual risk reduction (Myers et al., 2018). Another study assessed the staff perspectives about trauma-informed care in 68 LMICs but was only focused on emergency departments and the pediatric population (Hoysted et al., 2018). Furthermore, the findings from this study revealed that staff from LMICs need training on trauma-informed approaches. Despite the gaps identified above and the existing knowledge about trauma care in LMICs, there is no research that has been conducted in LMICs on the relevance of trauma- and violence- informed perinatal services.

Implementing TIC in clinical settings requires first to investigate if they work with a TIC lens, providing training, continuous staff support, hiring a trauma-informed team, and engaging service users by considering their experiences or perspectives (Brown et al., 2013; Drabble et al., 2013; Hopper et al., 2010). Individuals who are impacted by trauma and violence often seek healthcare at low levels, known as primary healthcare (Browne et al., 2015). In Rwanda, the majority of adolescent mothers from low-income families seek healthcare at the primary healthcare settings (health posts and health centers) since they cannot afford the public hospitals and private clinics' costs. Primary healthcare levels, when they are well operating, they are well-positioned to improve mental health outcomes (Browne et al., 2012), which would be beneficial to adolescent mothers.

Experiences of Adolescent Mothers in Perinatal Services

A growing body of knowledge stresses the high prevalence of mental health problems among pregnant adolescents (Adanir et al., 2020; Govender et al., 2020; Osok et al., 2018; Peter et al., 2017), which may shape access and utilization of perinatal services. In healthcare settings, teen mothers can have different experiences due to their past history and ongoing violence. In some instances, adolescent mothers may feel positively about the perinatal services they receive (Bwalya et al., 2018; Chikalipo et al., 2018; Manhica et al., 2021; Quosdorf et al., 2020; Sewpaul et al., 2021). According to other studies, adolescent mothers from countries that are high in income, such as Australia and Canada, have reported that the best practices of care for them are to provide them with choices and control in care (Millar et al., 2021; Shee et al., 2021). Therefore, these experiences have a significant influence on the health outcomes of adolescent mothers as well as their satisfaction with the quality of care they receive (Donnellan-Fernandez et al., 2018; McLachlan et al., 2016; Nieuwenhuijze & Leahy-warren, 2019; Rayment-Jones et al., 2021; Sandall et al., 2016). In addition, the services which are trauma-informed increase the rate of prenatal services appointments among adolescent mothers and improve their babies' health outcomes (Ashby et al., 2019), which would be more beneficial if they are trauma and violence informed. Some practices are being valued for offering safety, such as requesting permission to conduct the vaginal examination or having women insert the speculum herself (Mickey Sperlich et al., 2017).

A perinatal environment may not be safe and inclusive for women who are expecting a baby, particularly for adolescent mothers whose needs may be complex as a result of their pregnancy. There are so many unknown practices apart from examinations and pain management during labor which can re-traumatize a woman

(Montgomery, 2013), such as touching, telling women to spread their legs, and touching their babies (Slavič & Gostečnik, 2015). Quality of interactions between a childbearing woman and a healthcare provider matters in the prevention of re-traumatization (Millar et al., 2021; Reed et al., 2017). Disrespectful maternity care continues to be worrisome in perinatal services (Crooks et al., 2022; Miller et al., 2021; Mukamurigo et al., 2017; Mweteni et al., 2021; Rosen et al., 2015; Schwandt et al., 2021). This stresses the need to unpack these practices to create a safe environment for adolescent mothers.

Numerous studies have reported stigmatizing attitudes in perinatal services towards young mothers as a result of their pregnancy. Adolescent mothers are blamed by healthcare professionals to get pregnant at early age (Bwalya et al., 2018; Erasmus et al., 2020; Govender et al., 2019, 2020; Henning et al., 2020; Kola et al., 2020; Mweteni et al., 2021; Rukundo et al., 2019; Sewpaul et al., 2021). In some cases, adolescent mothers are overlooked because of their physical appearance, such as poverty-related clothing (Hackett et al., 2019). It has been shown that adolescent mothers from LMICs face challenges related to autonomy and making informed decisions as a result of socio-economic factors (Crooks et al., 2022) and this breaches confidentiality especially when they involve parents (Bwalya et al., 2018; Hackett et al., 2019; Henning et al., 2020). Consequently, adolescent mothers may feel disempowered and less confident (Wilson et al., 2009).

Gender of the healthcare provider determines care outcomes among adolescent mothers. For instance, adolescent mothers feel more comfortable being cared for by a female healthcare provider (Millar et al., 2021) and others change their healthcare facility because they do not like the male healthcare providers (Henning et al., 2020).

There have also been studies conducted in different countries which have found that adolescent mothers face structural barriers that hinder their access to, and utilization of, perinatal services as well. It is mandatory for adolescent mothers to attend perinatal services with their partners, for instance (Apolot et al., 2020; Hackett et al., 2019; Påfs et al., 2016).

Theoretical Frameworks

This study is grounded in trauma theory and the socio-ecological model as underlying perceptions that underline the relevance of this study related to the perinatal care services needs of adolescent mothers.

Trauma theory. Trauma theory started to emerge in literature early 1990s. Brown (1991) proposed a feminist perspective to examine the psychic trauma experienced by girls and women, and other minority groups. This perspective highlighted that any girl and woman in North America could encounter unique traumatic experiences which are in the "range of human experience" (p.121). These experiences were considered to be private and accommodated in a woman's lives and psyches and she conceptualized them as insidious trauma.

In her work *"Introduction." Trauma: Explorations in Memory*, (Caruth, 1995) Caruth states that trauma is related to the traumatic "event [that] is not assimilated or experienced fully at the time, but only belatedly, in its repeated possession of the one who experiences it" (p. 4). She also considered trauma as a flashback that threatens the victim and stems from the "structure experience" of a singular event. Brown and Caruth's works have been criticized to focus simply on the cause of trauma as individual rather than communities or societies at large (Craps & Buelens, 2008). Adolescent mothers' experiences differ depending on individual factors and

history. Craps & Buelens (2008) realized that previous trauma research did not consider that "the chronic pain suffering produced the structural violence of racial, gender, sexual, class, and other inequities has yet to be fully accounted for" (p.3).

Ecological theory. Bronfenbrenner's 1979 ecological theory posits that interactions and relationships between a person and environment are drivers of human behaviors. The ecological theory is also very important to understand and examine the social problems and their solutions (Sheafor et al., 2015). The fact that trauma and violence impact adolescent mothers, the ecological theory helps to understand how trauma and violence and impact their abilities and interactions. The adapted ecological model to risks of gender based violence states that there is a need to shift from individually focused interventions because those risks are interrelated and that they operate at the various levels including individual, relationship, community and society (Wathen & Varcoe, 2019).

Bronfenbrenner (1979) considers that a person's ecological system is composed of four interrelated levels which are microsystem, mesosystem, exosystem, and macrosystem. This model is very essential to understand how various environmental factors influence adolescent mothers' trauma. Microsystem is the most proximal ecological level which includes the environment in which individuals mutually and directly interact (Bronfenbrenner, 1979). This level represents the interactions between the adolescent mother and perinatal services providers.

Mesosystem, moving outward in Bronfenbrenner's ecological levels, consists of interactions which occur in different individual's microsystems (Bronfenbrenner, 1979). These microsystems are interconnected and influence each other. Adolescent mother' s microsystems include family and community. The perinatal services may be influenced by not only the interactions between the adolescent mother and the

healthcare provider but also the fact that they are exposed to other family and community factors. Exosystem is the third level of Bronfenbrenner's (1979) ecological systems theory which consists of an external environment in which an individual is not involved in but has got indirect effects on their lives. Lastly, macrosystem is the outermost level and is defined as the set of different socio-economic, religious, cultural factors which influence individuals' lives (Bronfenbrenner, 1979), and these factors are embedded in society in the form of social determinants of health. TVIC integrated approach highlights that violence and trauma are linked to socio/structural determinants of health (Wathen & Varcoe, 2019). All these systems are interconnected and a change in one level affects the others. Therefore, ecological theory lens helps to address social-economic inequities by exploring how they are embedded in communities or systems.

Conclusion

In conclusion, firstly, while integrating TVIC in services has been proven to be effective in different institutions from Western countries, there is a paucity of research assessing its effectiveness in LMICs. Secondly, there is a growing body of knowledge that shows the need to establish trauma and violence informed perinatal services. However, none of them has investigated how adolescent mothers could benefit from trauma and violence informed perinatal services due to their vulnerability. Thirdly, for a service to work within a TVIC approach, staff should be aware of the prevalence of trauma and ongoing violence as well as structural violence and its effects. If the staff understand the relationship between trauma and health, they can "create clinical environments that are less triggering for both patients and staff, identify referrals to appropriate trauma-specific services, and develop more effective therapeutic alliances and treatment plans with their patients" (Machtinger et al., 2015 p. 193).

In Rwanda, the literature on the prevalence of trauma, ongoing violence, existing structural inequalities in relation and their impacts among adolescent mothers is not well documented. Lastly, but most importantly, to create a safe environment, the service users' experiences should be taken into account before implementation of TVIC. This shows the need to investigate how adolescent mothers' experience perinatal services. Healthcare staff also should be assessed for their experiences when caring for adolescent mothers**.**

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Chapter Three: Research Methodology

Introduction

A research methodology is defined as the specific steps/processes by which the researcher collects and analyzes data (Grove et al., 2013); it is also described as gathering and analyzing data logically and systematically by utilizing all steps, procedures, and strategies in research investigation (Burns & Grove, 2009). In this section, the theoretical perspective underpinning the research, research design, including the study setting, sample, data collection procedures, data analysis, ethical considerations, and dissemination plan are presented. In this study, I utilized interpretive description (ID), a qualitative approach developed to generate knowledge around complex clinical issues in nursing (Thorne et al., 1997), and widely used by different applied health researchers (Abdul-Razzak et al., 2014; Archibald et al., 2015; Clark et al., 2011; Fyfe et al., 2020; Luciani et al., 2020).

Theoretical Foundation

In research, a philosophical perspective refers to the researcher's worldview that guides the research questions and the selected methods and needs to be identified because they practically influence the research (Creswell, 2014; Grove et al., 2013). They are the “basic set of beliefs that guides action” (Guba, 1990 p.17). This research is guided by constructivist and naturalistic philosophical standpoint. Social constructivists believe that individuals seek to understand the world in which they work and live (Creswell, 2009). Therefore, a constructivist researcher is interested in the processes by which individuals interact with each other. Guba & Lincoln (1994) explain that realities are experientially and socially based, local in nature, and their meaning depends on someone who holds them. Creswell (2009) articulated ideas on constructivism in qualitative research based on assumptions in Crotty (1998):

1. Interpretation and construction of meaning are important aspects of human interaction with the world. It is important for qualitative researchers to ask open-ended questions in their studies so that study participants can express their opinions.
2. Social and historical perspectives shape the way individuals live in their culture. Therefore, qualitative researchers engage with them by visiting their settings to interact personally. The researcher's own background and experiences influence the way they interpret the findings.
3. The meaning is generated socially, either in or out of an individual's community. This is why qualitative research is inductive, and the researcher generates meaning from the data gathered from the field.

ID epistemological standpoints share the similarities of the key axioms of naturalistic inquiry (Thorne, 2016). Those shared features are that ID studies i) are conducted in a naturalistic way to protect the ethical rights of the study subjects; ii) acknowledge that subjective and experiential knowledge contributes to knowledge generation in applied research, i.e., it is a pragmatic approach; iii) consider that human expressions are enacted from time and context; iv) give value to commonalities as well as capitalizing individual expressions; v) are predicated on the belief that human experiences are socially constructed and not separated from their nature; vi) recognize that multiple realities are constructed and sometimes maybe contradictory; and vii) acknowledge that during the research the researcher and the researched are inseparable and they influence each other for the findings production. In this study, to understand how perinatal services support adolescent mothers, the researcher co-constructed knowledge with adolescent mothers, nurses, midwives, MCHWs, managers of the health centers, and community health workers.

Research Approach

In this study, I used a qualitative approach described as an investigation of phenomena, typically in an in-depth and holistic fashion, by collecting rich narrative data using a flexible research design (Polit & Beck, 2017). Fain (2013) further states that "[it] is a way to gain insight through discovering meanings" (p. 237). It helps us to understand individuals' experiences, explore the transactions between people and their environment, and what these experiences mean to them as well as shape their behaviors and decisions (Fain, 2013; Gerrish et al., 2015) . Therefore, using this research approach enabled me, the researcher, to explore and describe the experiences of adolescent mothers accessing perinatal services in Rwanda and the experiences of their providers (nurses, midwives, and maternal community health workers [MCHWs]) in the provision of care.

Research Design

The research design is defined as the researchers' approach to answer the research questions (Polit & Beck, 2017). Research designs are further explained by Creswell (2009) as plans and procedures that help the researcher make decisions from broad assumptions to inform data collection and analysis. This study utilized an interpretive description (ID) methodology. According to Thorne (2016), ID is "an approach to knowledge generation that straddles the chasm between objective neutrality and abject theorizing, extending a form of understanding that is of practical importance to the applied disciplines within the context of their distinctive social mandates" (p. 29). This research design was developed by nursing scholars, after realizing the limitations of the existing research designs, to assist nursing researchers to generate new knowledge that is applied to their own clinical practice to meet their

specific needs (Thorne et al., 1997). ID shares some features with other traditional methodologies. According to Thorne et al. (2004), "the design strategies in interpretive description borrow strongly from some aspects of grounded theory, naturalistic inquiry, and ethnography, drawing on values associated with phenomenological approaches inherent in the methods of data collection" (p. 3). It also uses the same tools as these methodologies, but the results should not be theorizing, instead, they should offer practical solutions to clinical problems (Thorne, 2016), i.e., ID is a pragmatic approach to research.

ID assists nurse researchers to “build methods that are grounded in our own epistemological foundations, adhere to the systematic reasoning of our discipline, and yield legitimate knowledge for our practice” (Thorne et al., 1997 p.172). In nursing, as in other applied health professions, employing ID helps understand nurses' "ways of knowing" (Thorne, 2013 p.295) as well as addressing the "so what" (Thorne, 2008 p.33). Therefore, in the proposed study, ID discussed how perinatal services support adolescent mothers to inform the delivery of TVIC.

Since ID development, qualitative nursing researchers and other applied disciplines have asserted that ID is useful to provide “logical structure and philosophic rationale” (Thorne, Kirkham, & O’Flynn-Magee, 2004 p.2). Moreover, it takes qualitative inquiry from the descriptive level to a more abstract form of interpretation. ID has unique characteristics which differentiate it from other traditional qualitative methods. According to Thorne (2016) and Thorne et al. (2004), ID is a flexible and open method that allows the researcher to set the knowledge-generating research questions in the context of applied health discipline. It is useful to provide a coherent, logical structure, generate the relevant practice findings and pay attention to

disciplinary biases (Hunt, 2009). ID acknowledges that the researcher brings theoretical and practical knowledge to the project to overcome some research design challenges. Also, to ensure the findings' trustworthiness, ID encourages the use of multiple data sources to provide the triangulation (Thorne, 2016). As a researcher, I am a registered nurse and have worked with adolescent mothers. This means that I have prior practical knowledge of how perinatal services support adolescent mothers in Rwanda.

Study Setting

Research setting refers to the social, physical, and cultural site where the research is being conducted (Given, 2008). It also may be classified as natural, partially controlled, or highly controlled (Grove et al., 2013). The main focus of qualitative research is meaning-making, and the participants meet with the researcher in the natural setting (Given, 2008). In this study, the setting was described based on the area and the site.

Study Area. Rwanda, also named 'The Land of a Thousand Hills,' is a landlocked country located in central Africa with a surface area of Km^2 26,338, four provinces and the city of Kigali, and 30 districts. Tanzania borders it to the east, Burundi to the south, the Democratic Republic of Congo to the west, and Uganda to the north (The Republic of Rwanda, 2021). As of 2022, Rwanda's resident population was 13,246,394 (NISR, 2022). Rwanda has 8 national referral hospitals, 4 provincial hospitals, 39 district hospitals, 509 health centers, 13 prison clinics, 1220 health posts, 115 private dispensaries, 129 private clinics, and 9 private hospitals (NISR, 2022). This study was conducted in Rwamagana District, the eastern province of Rwanda.

This area was chosen because, according to NISR et al. (2020), it has the highest teenage pregnancy rate compared to other provinces.

Study Sites. This study was carried out in eight primary health care settings in the Rwamagana district. Rwanda is listed among the few countries which have achieved universal health coverage due to a commitment to equity-oriented care, inclusiveness and quality services in primary healthcare (WHO, 2017). In Rwanda, the primary health care setting includes the health centers and receives most community-based health insurance users (commonly known as mutuelle de santé). It includes health centers and health posts (MoH, 2017). In Rwanda, primary healthcare settings handle 85% of population needs (WHO, 2017). As of 2022, the Rwandan primary healthcare settings occupy 56% of all public health facility beds (NISR, 2022). Rwamagana district has 15 health centers and 33 health posts that offer a range of perinatal services, including antenatal care, maternity, and postnatal care.

Study Population

Study participants were adolescent mothers aged between 15 -19 years who accessed perinatal services in primary health care settings and nurses and midwives who worked with adolescent mothers. Because maternal community health workers (MCHWs) link communities with healthcare centers, and provide care to mothers and children (MoH, 2017), they were also included as study participants. MCHWs are also part of national health strategy and in each village of 100-150 households, there is a MCHW also known as Animatrice de Santé Maternelle (ASM) in the Rwandan context. Their roles include identifying pregnant women, following up pregnant women and their newborns, encouraging utilization of Antenatal Care (MoH, 2013). Additionally, key informants (head of health centers and community health officers)

were also interviewed. Community health officers supervise the MCHWs' activities in collaboration with the health centers.

Sampling Plan

Sampling Approach. Purposive sampling was used to select the participants. Purposeful sampling is widely used in qualitative research for the identification and selection of participants who can provide rich information related to the study of interest and the research question (Fain, 2017). In ID, it is essential to select the study participants ready to share their experiences (Teodoro et al., 2018). Therefore, purposive sampling was employed in this study to select adolescent mothers and their providers in perinatal services who were able to share experiences of perinatal service delivery. It was also used to select the key informants (the heads of health centers and supervisors of MCHWs). Also, I used this approach to select the documents used in Antenatal Care (ANC), and Prevent Mother To Child Transmission (PMTCT).

Sample Size. In qualitative research, the sample size is determined by the research question, quality and breadth of data, and study (Cleary et al., 2014). According to Thorne (2016) "interpretive description can be conducted on samples of almost any size" (p.103). ID studies have included anywhere from 6-32 study participants, however, a small sample size is not the issue in ID, rather it is the richness and depth of the data from the research participants' experiences that is central (Teodoro et al., 2018). Depending on the nature of the research question, the sample size also may be large. For recruitment, sampling and data collection in clinical practice, Thorne (2016) notes that ID uses the following principles of disciplinary logic: needed knowledge, options available to get close to the subject of interest as much as possible, and how the inquiry can be conducted consistently and

respectful to the ethical practice and research guidelines. Moreover, the information power determined the sample size. According to information power, fewer participants are needed when the sample contains more relevant information. The adequacy of the final sample size must be continually evaluated during the research process after an initial approximation of the sample size is made (Malterud et al., 2016). Thus, after considering ID principles for the participants' recruitment and the information power, the following study participants were recruited: 15 adolescent mothers, 12 nurses and midwives, 12 MCHWs, and seven key informants (KIs). For documents review, Antenatal Care (ANC) and Prevent Mother To Child Transmission (PMTCT) guidelines were reviewed.

The following inclusion criteria were applied to recruit the study participants. For adolescent mothers: a) attend perinatal services (ANC, PMTCT, and maternity department), b) aged between 15-19 years, and c) willing to share their experiences using perinatal services. For MCHWs: a) have worked with adolescent mothers for at least one year in the community and b) willing to share their experiences. For nurses and midwives: a) those who work in perinatal services (PMTCT, ANC, and maternity) b) provided care at least one year in perinatal services, and c) willing to share their experiences working in perinatal services. For KIs: a) Head of a health center or supervisors of MCHWs b) has been assuming this role for at least one-year b) willing to share their firsthand knowledge to oversee perinatal services or supervise MCHWs. Lastly, for documents review: National guidelines used to provide care in ANC and PMTC.

Entering the Field

Before getting research ethics board approval, through emails and phone, I contacted the study sites to make sure that the study was feasible from an ethics and recruitment perspective. After gaining ethics approval from Western University (Appendix A) and University of Rwanda (Appendix B) as described in the ethical considerations section, I proceeded into field. Prior to entry to the field, I had identified the head of the health centers (HCs), presented the letter of authorization request (Appendix C), and discussed the nature of the study. The heads of health centers linked me with the local leaders who helped me to disseminate the recruitment information.

Participant recruitment. For adolescent mothers, the local leaders announced the recruitment information (Appendix D) to the general population through national community work (known as umuganda). Umuganda happens the last Saturday of every month, when Rwandans gather to perform community service. This includes cleaning a specific area, planting trees, and building infrastructure, among other activities, combined with talks on different topics. This was an opportunity to pass recruitment information on to adolescent mothers directly or indirectly through their parents, family members, friends, and neighbors who might know them. The advertisement was left at the executive village office with the researcher's contact information so that anyone who wanted to participate in the study could contact the researcher. A separate advertisement (Appendix D) was left for ANC, maternity and immunization services. An adolescent mother who wished to participate contacted the researcher and made an appointment to meet at a specific area (mostly at the University of Rwanda-Rwamagana campus or the health centers). I explained the research study and inclusion criteria to adolescent mothers. I left the information letter

(Appendix G) with contacts so that whoever was interested could contact me and come with their legal guardian. For nurses and midwives, I explained the study to the potential participants in a staff meeting and left them with the letter of information (Appendix H) to make sure they understood the study. On the letter of information, there was my contact information so that of someone was interested in participating, they could contact me. For MCHWs, I explained the study to them in their monthly meeting and left them with a letter of information (Appendix H) with my contacts so that they could contact me if interested to take part of the study. For key informants, after requesting an appointment over the phone, I met with them in their offices to explain the study. I left the advertisement (Appendix D) with my contacts (email and phone number) at the health center.

Data collection procedure. For adolescent mothers, privacy was ensured; individual in-depth interviews were conducted in a safe and private space. For the primary healthcare settings located near the University of Rwanda/Rwamagana campus, I used two quiet staff offices at the campus. For the clinical settings far from the campus, I worked with the head of the health center to identify an appropriate room.

Considering the social location and primary participants (adolescent mothers) in this study, I hired two female research assistants (RAs) to conduct interviews. Some scholars have argued that gender of the researcher does not change what is shared by research participants (Blohm et al., 2006; Blom et al., 2011; Campanelli, Pamela O'Muircheartaigh, 1999; Haunberger, 2010; Leeuw, 1999; Link, 2006; Pickery et al., 2001; Vassallo et al., 2015). However, other scholars have identified that the gender of the research moderator during an interview matters (Blom et al., 2011; Jackle et al.,

2013). Dixon (2015) and Samuels et al. (2015) note that normally adolescents must be interviewed by an interviewer of the same gender and relative age to express themselves freely. Also, Clark (2009) makes the point that children and youth are unlikely to share their information with adults during an interview due to issues of power and authority. Researchers should consider socio-demographic characteristics such as race, age, and gender when choosing someone to interview adolescents (Krueger & Casey, 2015). Therefore, this study considered the above in the recruitment of the RAs. I trained the RAs on the study, interview guides, interviewing, situating into research role, reflexivity, interpretive methodology, and TVIC. They signed a confidentiality agreement (Appendix E). Since adolescent mothers, nurses, midwives, and MCHWs might experience an emotional response to discussing potentially distressing events, a protocol for high risk interviews was developed (Appendix F) and one of the RAs trained in mental health interventions monitored concerns and responded accordingly. Six adolescent mothers did have emotional responses, especially crying and anxiety throat tightness. Interviews were stopped immediately, and the participants were asked whether they wanted to continue. All participants wanted to continue with the interviews, and none required a mental health referral. After every interview, a debriefing session was conducted between the study participant, researcher and RAs to address any challenges which might occur during interview. Three follow-up calls (one day, two weeks, and one month after the interview) were made to participants to ensure their safety. Every call was accompanied by advice to seek help at a health facility if they had any concerns. No adolescent mothers required such referrals on follow-up.

The RA spent at least 30 minutes creating rapport, following which assent and informed written consent were obtained. In a Canadian context, informed consent is

not based on the age. A child may consent as long as they are able to understand very well the significance of the research (Government of Canada, 2021). However, in Rwandan context an adolescent below 18 years must sign an assent form and their guardian(s) sign an informed consent. Therefore, in this study, adolescent mothers aged between 15-17 years signed assent forms and their legal guardians signed an informed consent (Appendix G). Adolescent mothers 18 and over signed an informed consent (Appendix G). Legal guardians are biological parents, but when an adolescent is an orphan, community consent is allowed from leaders, religious people, older siblings and teachers (Vreeman et al., 2012). Furthermore, it is the responsibility of the researcher to create opportunities for adolescents to consult everyone they trust (Santelli et al., 2017). Some adolescent mothers in this study were ostracized by their families as a result of teenage pregnancy. Hence, they wanted to bring other people besides their family members, such as MCHWs or friends. I read and explained the letter of information to the legal guardians and gave them time for questions and decided if their children would participate in the study. Whoever needed more time or to go home to decide, they were allowed and met with the researcher and RAs on the following day. However, I explained that the child had the final word on the decision and that if the child did or did not want to participate, the parents should not influence them. The interview guide (Appendix I) was composed of open-ended questions, and the RA used some probing questions. The interview was in Rwanda's primary language, Kinyarwanda. Informed consent included consent to be audio recorded; two study participants wished not to be recorded, for personal reasons, for parts of their interviews. When the recorder was off, RAs took detailed notes during the interview. Also, field notes were taken during interview, with explanations provided to participants as to what they would be used for.

For MCHWs, nurses, and midwives, privacy was ensured; they were taken to a private room to conduct the in depth-interview. The interview took place during non-work hours to avoid interfering with work schedules. I spent 20 minutes with the study participant before the interview to explain the letter of information, creating rapport and gaining informed consent (Appendix H). The interview guide (Appendix K) was composed of open-ended questions, and I used invitational questions to engage the participants in discussion. The interview was in Kinyarwanda and was audio-recorded, with consent. Field notes were also taken to record the participants' reactions and non-verbal language.

Key informants were interviewed in their offices to ensure privacy, also during non-work hours. As with other participants, the first part of the session included reviewing the letter of information creating rapport and obtaining informed consent (Appendix H), including permission to record. The interview guide (Appendices L&M) was composed of open-ended questions, and I used invitational questions to engage the participants in discussion, Kinyarwanda. After the recorder was turned off, three KIs expressed a desire to further share their experiences without the recorder. These thoughts were written out, along with field notes to record non-verbal elements of the discussion.

Upon completing each individual interview with the adolescent mothers, MCHWs, nurses, midwives, and KIs, the study participants were thanked and given time to ask questions about the phenomenon under the study. Each study participant received a $10 CAD honorarium (8,000 Rwandan franc) for compensating their time, meal, transport, and airtime communication fee.

Approaches Used to Overcome Challenges during Data Collection. Entering the field has many challenges for applied practice researchers. Thorne (2016) offers some guidance that she considers not the fundamental requirements of the ID approach but useful to know in an applied context. I used the following:

Situating Self within the Research Role. In applied research, the researcher may face challenges that can alter the data collection in the research setting, maintaining the integrity of the findings, especially the credibility. Those challenges are related to theoretical, ethical, and practical aspects. To have credible and meaningful data, the researcher should stay away from their own "former self" temporarily to become an instrument of the research (Thorne, 2016). This was achieved in the following ways:

First, ***tracking reflections*** is done by acknowledging and documenting the researcher's background preconceptions on the phenomenon under the study before entering the field (Thorne, 2016).The assumptions and preconceived ideas were described in introduction part (chapter one) of this project. I used the field notebook or a personal reflective journal as an important part of the research process. I also trained the RAs on how to exercise reflexivity and situating themselves within the research role.

Second, ***learning not to lead*** is a key aspect for the researcher to situate themselves into a research role. Being an applied researcher is very different from being a clinical practitioner, or a research interview is different from a clinical interview. The latter should not influence the way you are conducting your research, for example interviewing. This helps the applied researchers to become aware of their clinical communication habits and identify the appropriate strategies to control them over the research interview (Thorne, 2016). Having worked as a nurse in clinical

settings and with adolescents in many reproductive health projects, I learned how different the clinical interview is from the research interview, which was an added value to my study. Because the RAs were also healthcare professionals, I trained them to distinguish clinical interviews from research interviews.

Third, ***disclosing the discipline*** to the study participants is another guidance. The research team introduced themselves to study participants, and explained the nature of the study. This shaped the way data were obtained. The applied health professionals should seek a way to introduce their topic of interest from their professional backgrounds combined with their current roles as "a learner" from the study participants who have expertise in subjective experience (Thorne, 2016). This helps to clarify the need to conduct the study, expectations for engagement and allows the research to emphasize that the generated knowledge will be of important value to the betterment of care in the future. In this study, we explained the motivation behind my study as a nurse who wants to help my fellow nurses and midwives to improve their practices when caring for adolescent mothers in perinatal services.

Fourth, sometimes the research interview's nature may shift to the clinical interview depending on the questions under discussion. This is an issue that is so-called ***"stepping out of the role***." The researcher bifurcates the research interview and goes ahead with the clinical interview after gathering the data. However, when an interview becomes more clinical, it is up to the researcher to decide if the data will be analyzed. This can be prevented using a reflective notebook which always helps the researcher to do critical self-inquiry (Thorne, 2016). Since the interview for adolescent mothers was conducted by the RAs due to social location, the RAs were trained to do critical self-inquiry, which helps the researcher to balance between

learner side and clinician side of which is dominant, and I made the regular follow up and advised whenever possible. Under this study, experiences for perinatal services triggered some emotions during an interview which might require shifting from the research interview to the clinical interview. In this context, I decided if the shared experiences would be important in the analysis or not under the faculty advisor consultancy. All the shared experiences were considered for data analysis.

Fifth, ***revealing and concealing*** is another way of overcoming challenges. In applied health research, the most common issue is raised in the researcher's personal location under the same question being investigated. This happens when the researcher shares the same experiences as the study participants. There is no right way to answer this dilemma, especially when the study participant asked the same question to the researcher who has similar or prior experience. The researcher should find out the best way to divert the question and continue with the interview; otherwise, it may influence the study participants' discourses (Thorne, 2016). In this study, the researcher assessed first any risk factors the RAs may face such as the past history of trauma. After the recruitment, the RAs were trained on how to divert irrelevant questions and control emotions. It was apparent that RAs developed slight emotional responses as a result of the stories they heard from the participants during the interviews. Every interview was followed by a debriefing meeting to ensure they were ready to move forward. They decided to continue interviewing study participants. RAs were contacted after all interviews to determine if any problems existed so they could be supported. RAs did not experience any further mental problems, but they shared the reflections with the researcher.

Sixth, because the ID's main purpose is to understand subjective experiential knowledge, the researcher cannot fully identify what will happen in the research

process. Therefore, there may be ***"negotiating informed consent***." Through this, the researcher may clearly explain the consent by indicating the relationship between the data collection and data analysis and "the best guess" of the researcher needs the interview to proceed (Thorne, 2016). Thorne also added that "the business of informed consent within the interpretive description approach is best constituted as an ongoing moral obligation, enacted in verbal as well as nonverbal behavior, to create the optimal conditions to ensure that the people we study to reveal what they are comfortable with and no more" (p. 124). We faced several socio-cultural challenges while negotiating informed consent and assent as a research team. These challenges include family structures and social relationships (patriarchal cultures, extended family, and challenges of gatekeepers); level of education; family socio-economic status and stigma. Strategies were used to overcome these challenges including building relationships, clear communication, clear explanations and supporting continuous engagement and participation of adolescent mothers (Sherwood & Parsons, 2021).

Seventh, ***finding your tongue*** is another guidance that helps during an interview. Even though the introductory part of the research goes on very well, it may not be easy to engage the study participants in a good manner. A researcher has to avoid using prompts such as "that is good, I understand, I agree" because they can bias the study participants to understand that sometimes some of their accounts are right, others wrong (Thorne, 2016). This means that in a qualitative interview, the researcher should not demonstrate to the study participants that you understood completely what they are saying; rather, you should always seek to understand. In this study, the RAs and I rehearsed in advance on good questions to avoid value-laden prompts. Again, I

analyzed the data concurrently with the data collection; this helped to shape good questions to use in the following interviews.

Lastly, the priority of ***"constraining your influence"*** means how the researchers examine their capacity over data collection and analysis as a result of engagement. Even though disciplinary disclosure and informed consent have been discussed above as important elements to situate the researcher into a research role, they can greatly influence one way or another (Thorne, 2016). Firstly, because researchers cannot change their influence completely and who they are, ID researchers should be mindful of how their prior experiences can change the study participants' accounts, materials, and interpretations. In this study, the RAs and I had prior experiences in reproductive health and mental health. Therefore, we engaged in daily critical reflexivity. The following strategies were used: taking notes, memoing after each interview, and editing our subjectivity statements. We answered the following questions every morning before the interviews: "What do I know? How do I know what I know? What shapes and has shaped my perspective? With what voice do I share my perspective? What do I do with what I have found?" (Marshall & Rossman, 2016 p.118). Secondly, the obtained data were aligned with what was explained in the informed consent (study objectives) instead of diverting the new findings, which answer the study objectives the study participants were not intended to answer. In this study, this was avoided by collecting data concurrently with data analysis.

Situating Self within the Setting. How researchers represent themselves in study settings and during the recruitment of study participants is the researcher's challenge (Thorne, 2016). Researchers employing ID, often feel at ease in practice

settings because of their experience in practice. However, putting on 'the researcher's hat,' may seem unfamiliar.

Firstly, the ID researcher may be ***an insider or outsider*** in data collection (Thorne, 2016). I made sure that RAs and I are not interviewing participants we had previously interacted with as an insider. Given the familiarity with the research setting, being an insider had advantages, such as entry into the field of study, accessibility, consultancy, and contextual information. However, it has been associated with disadvantages that the ID researcher should anticipate they have possible solutions to overcome them prior to entering the field, including difficulty stepping out of the clinician role, confusing participants who were previously familiar with the researcher in a clinical role, absorbing unverified practical assumptions, and changing the way the study participants shape their stories to avoid any conflicts (Thorne, 2016). For the outsider, it takes time for the researcher to build relationships with study participants, gain contextual information, and gain the trust of the people in the research setting. For example, sometimes researchers are seen as setting out to expose unhidden poor practices (Thorne, 2016). In this study, neither the researcher nor the RAs were familiar with the selected settings (HCs). Therefore, to overcome the mentioned challenges of being an outsider, I built a strong relationship with those working in the research setting (i.e., potential study participants), including clearly conveying the research purpose.

Secondly, ***navigating access*** may be a challenge in study settings. The researcher should be aware of the protocols to follow when they want to access information. In addition, even though the main goal of ID research is knowledge development, most of the practice settings may locate the researcher to "be something of a nuisance" (Thorne, 2016 p.129). Thorne proposes a number of strategies to

address the challenges of access to the field including clear communication of the research process, availing contact information to everyone concerned, and explaining to the study participants about the study's background information. Also, the researcher needs to be ready to adapt to the changing clinic environment and adhere to the setting's policies and procedures (Thorne, 2016). All these strategies were utilized in this study.

Thirdly, ***watching and doing*** is another challenge in ID research. Being a health professional simultaneously with enacting the role as researcher may affect the data collection process (Thorne, 2016). Whenever possible, I made sure that the interviews were not conducted at the clinical settings to avoid the dual roles. I used the University of Rwanda, Rwamagana campus. Some of the interviews we conducted at health centers were conducted in isolated rooms far away from clinical areas.

Fourthly, even though the ID is conducted in practice settings, sometimes the interviews may be conducted in another setting to ensure the participants feel safe and comfortable (Thorne, 2016). In this study, all interviews were conducted safely because we met the study participants in their natural settings such as health centers, and the University of Rwanda-Rwamagana campus.

Fifthly, during the research process, it is a requirement for all researchers to ***honor confidentiality***. Because this study exposed some practices from different settings, I would not use any names of the research settings/study sites. The main purpose of ID findings is to advance the institutions to make a constructive change, not alienating them (Thorne, 2016).

Data Collection Instruments

In ID, like other qualitative approaches, the researcher is explicitly considered as an instrument of the study (Thorne, 2016). Triangulation is defined as using multiple sources of data depending on research questions (Thorne, 2016, 2019). This study used in-depth interviews with adolescent mothers, nurses, midwives, MCHWs, and KIs and perinatal services documents review. The findings from this review were used to supplement the participants' findings.

In depth-interview. In qualitative research, the researcher explores the focus of the study with a set of open-ended questions (Polit & Beck, 2017). To explore clinical issues, ID capitalizes on the in-depth interview as a useful core for knowledge development (Thorne, 2016). In this study, in-depth interviews were used to determine both the common and unique elements from the study participants' accounts. This method was chosen over focus groups because, as Thorne (2016) notes, it assists the research participants to freely narrate or "tell their own story" to produce meaningful variation (p. 91).

The interview questions are developed using existing knowledge on the topic under research question (Krauss & Omar, 2009), extensive reading of the previous studies done on the same topic, and validation with expert qualitative researchers and in the field under the study through consultation and workshops (Kallio et al., 2016). Based on the literature about perinatal services utilization and the research question's nature, the interview guides (Appendices I, J, K, L&M)) were developed. Since most of the study participants in Rwanda cannot speak English fluently, the interview guides were back-translated in Kinyarwanda by certified translators (Appendix N) and

approved by the researcher, clinical experts in midwifery and mental health department from the University of Rwanda.

Different qualitative scholars have proposed the interview duration between 1-2 hours as the accepted duration (Creswell, 2007; Flores & Alonso, 1995; Morgan, 1997). According to Teodoro et al. (2018), interviews from different studies which used ID as a methodology lasted between 20 minutes up to 2,5 hours. Therefore, the interviews of the current study were ranged between 22-72 minutes.

Documents Review. Document review is an important source of subjective knowledge or discourses that can help a clinical researcher explore underlying opinions, beliefs, and attitudes about a phenomenon (Thorne, 2016). In this study, ANC and PMTC guidelines were reviewed to determine the extent to which they are trauma- and violence-informed using a data extraction sheet (Appendix O). The data from this documents review supplemented the in-depth interviews to assist in answering the research questions.

Data Construction and Analysis

As discussed above, this study employed ID, which supports concurrent data collection and analysis; one iteratively influences the other (Thorne et al., 2004). Thus, I started data engagement as soon as I entered the field to confirm, test, explore, and expand on the themes and concepts being explored (Thorne, 2016). Unlike other traditional qualitative research methods, which require bracketing the preconceptions, ID acknowledges that there are existing clinical pattern observations, theoretical knowledge, and scientific facts from which health research is generated (Thorne et al., 2004). This constitutes the preliminary analytic process and predetermines the sampling method, design, and analytic choices.

Thorne (2016) states that gaining new constructions from the data "is unquestionably the most painfully difficult and yet the essential element in what constitutes a credible interpretive description" (p. 155). In ID, meaning is socially constructed between the researcher and participants and the researcher has to be aware of his own disciplinary preconceptions to ensure the interpretation integrity (Thorne, 2008). Thus, the RAs and I engaged in critical reflexivity before entering the field and throughout the research process to be aware of the preconceived ideas and assumptions which may influence the research process.

Data organization is described as selecting and arranging data depending on their sources (Creswell, 2014). Polit & Beck (2017) further explain it as a way of classifying and indexing data into small groupings and structures which are easy to retrieve and process. Thorne (2016) describes data sorting and organizing as how the researcher gets ready to manage and organize data, including tracking transcriptions, filing, and coding, and to ensure data safety and easy retrieval using software. In this study, I sorted and organized the data depending on the interview guide's questions using Dedoose software. In addition, thematic analysis, one of the qualitative analysis methods to identify, analyze, and report themes within the data (Braun & Clarke, 2006), was employed. This method includes six steps: data familiarization, generating initial codes, searching themes, reviewing themes, defining and naming themes, and producing the report.

According to Thorne (2016) data familiarization as permits the researcher "to react to the initial pieces of data that are swimming around in the collective soup" to find meaning (p. 157). In the proposed study, I ensured the records were accurate and spent more time listening to the audio. Data were transcribed verbatim and translated back in English. The coding is considered the earliest way to engage in data collection

(Thorne, 2016). Thorne provided the analogy of sorting laundry when describing coding; that this is a bit like sorting out laundry clothes based on their colors (dark versus light) but with the more subjective judgment due to other features such as fabric, color-fast or not, and washable or not. In the proposed study, data were coded and analyzed concurrently with data collection. Open coding, also known as microanalysis, was used; it is adapted from the traditional grounded theory methodology (Strauss, 1987; Strauss & Corbin, 1998). However, in ID, "because the objective is rarely at the fine-tuned level of words and expressions, but far more often in the realm of thematic patterns and recurring ideas, it is quite important not to be derailed by excessive precision in your early coding" (Thorne, 2016 p.160). After reading the transcripts together, my supervisor and I assigned a code to each quote aligned with our research questions.

After having a long list of codes, the thematic coding was used to identify emerging themes (Braun & Clarke, 2006). It consisted of sorting out codes and find out how some can form an overarching theme. Because ID realities are socially constructed, I used constant comparative analysis (CCA) to compare and contrast different constructions (Thorne, 2016). In this study, I compared the themes and codes for refining the candidate themes. For example, counseling vs psychological safety; empowerment vs strength-based approaches; continuity of care vs unconditional support. CCA was also ensured through one participant at time interview transcription and translation. After this, I used two levels of reviewing and refining themes. In level one, I went through all the coded extracts to identify if the candidate themes formed a coherent pattern or not. In level two, the process was quite similar, but it consisted of individual themes versus the entire dataset. This step helped me to identify good themes or coding the missed data during the process. In this study, I went through all

these processes in consultancy with my supervisor and committee members. I defined and renamed themes after being satisfied with the set themes. Lastly, after defining and refining the themes, I generated the report based on the themes identified.

The Credibility of Interpretive Studies

The four standards of credibility outlined by Thorne (2016)) - epistemological integrity, representative credibility, analytic logic, and interpretive authority – were followed carefully.

Epistemological Integrity. Thorne (2016) argues that all qualitative studies should demonstrate epistemological integrity in the sense that there is "a defensible line of reasoning from the assumptions made about the nature of knowledge through to the methodological rules by which decisions about the research process are explained" (p.233). This means that during the research process, I acknowledge the epistemological standpoint consistent with the research question and identify the interpretive strategies that follow in a logical way (Thorne, 2019). I also conducted a critical review of the literature to reflect the research questions under the study. The researcher's theoretical, professional, personal, and methodological assumptions on the research process were also discussed throughout the research methodology.

Representative Credibility. Thorne (2016) posits that there should be a clear relationship between the theoretical claims and sampling in qualitative research. In this study, I achieved representative credibility through methodological triangulation (in-depth individual interviews and documents review), as explained in the data collection section.

Analytic Logic. Analytic logic is achieved by utilizing an audit trail of analysis to ensure analytic consistency (Thorne, 2016). I demonstrated a reasoning process to

the reader on how they went through all processes (Thorne, 2019). I also achieved this criterion through data collection and analysis. I actively participated in data transcription and translation in collaboration with RAs. Data analysis was done concurrently with data collection. Field notes were also kept and analyzed to trace the data collection and analysis.

Interpretive Authority. ID reorganizes that "knowledge is perspectival," which implies that the researcher's descriptions and interpretations should be trustworthy and have truth external to the researcher's own experience or bias (Thorne, 2016 p. 235). I generated the research questions according to the gap identified in the literature. Fields and reflexive notes helped me to achieve interpretive authority. Lastly, the interpretation was checked by the supervisor and committee members.

Thorne (2016) added criteria named beyond the evaluation due to larger disciplinary, historical, and social contexts where the research is conducted. Those are moral defensibility, disciplinary relevance, pragmatic obligation, contextual awareness, and probable truth.

Moral defensibility seeks to understand if the knowledge being generated is necessary and important to society (Thorne, 2019). It also posits that we must first be sure of the possible uses of the research findings in the case of sensitive research and benefit of those we serve. In this study, the problem statement, research purpose, research questions, and literature review and identified gaps show how the findings were important to adolescent mothers in perinatal services and serve as the basic ingredients to inform the delivery of TVIC in perinatal services. *Disciplinary relevance*, states that, as ID is relevant to applied health sciences, the research findings should apply to practice and contribute to disciplinary science development (Thorne, 2016). My professional discipline is nursing, and the generated knowledge

will contribute to the improvement of nursing practices in perinatal services when caring for adolescent mothers. *The pragmatic obligation* assumes that the research findings from applied health sciences will be applied to practice (Thorne, 2016). This study recruited MCHWs, nurses, and midwives who work in perinatal services to share their experiences working with adolescent mothers. The generated findings were based on their daily practices. KIs questions were mainly focusing on MCHWs, nurses, and midwives and how they support them. Also, in every interview guide, either for adolescent mothers, providers, and KIs, there was a question specifically asks about the recommendations to improve perinatal services. *Contextual awareness* is another domain that is used to assess the credibility of ID researches. This domain states that the epistemological claims within which qualitative research methods are built trace the generated knowledge and the society that constructs it (Thorne, 2016). Thus, qualitative health researchers should consider how their own perspectives are inevitably related to the disciplinary perspectives, historical and social contexts. Also, because some meanings are socially constructed, I recognized that I had to articulate the study findings as contextual and always be aware of my own perspectives. Thus, I used self-reflexivity as a researcher and interpreter.

Due to the ambiguous zone of validity, the qualitative research findings are considered *probable truth*. This means that there are no standard measures to evaluate the truth that the qualitative research findings hold. Thus, as qualitative researchers, we agree that the findings are considered true until they are proved to be not (Thorne, 2016). This research did not generate findings with absolute truth; however, it generated insights and understanding of probable truth on how perinatal services in primary healthcare settings prevent trauma and resist re-traumatization for adolescent mothers. Thorne et al. (2004) purported that the ID does not produce the new truth;

rather, it generates what they considered "tentative truth claim" about shared clinical phenomenon (p. 4).

Ethical Considerations

This study was approved by the Western University Health Science Ethics Board (HSREB, project ID: 119846) and the University of Rwanda, College of Medicine and Health Sciences Institutional Review Board (Approval Notice: No 330/CMHS IRB/2021). Following approval from these two Universities, the researcher sought permission from Rwamagana district (No 4159/05.01). I presented the approval from Rwamagana district to the heads of health centers. During data collection, I ensured the participants' rights are well protected as follows (Grove et al., 2013):

- Right to self-determination: I explained the nature of the study and the participants' rights; i.e., the participants were free to participate or not, and if they chose to participate, had the right to withdraw from the study anytime without any negative consequences.
- Right to privacy: The interviews took place in private places where the participants' information could not be heard or accessed by others.
- Right to confidentiality and anonymity: The research participants were ensured that their data were kept in a safe place and that their identities would in no way be associated with the data, i.e., the research participant chose a pseudo-name (code) to be used on demographic information. Because of the nature of the study which could potentially expose some practices, I did not disclose the research sites' names. Interview recordings were uploaded securely to a Western University OneDrive.

- Right to fair treatment: I made sure that the research participants were treated equitably. The participants were given time to ask questions in case they were not treated fairly by ensuring that we used the same interview guides to all participants.
- Right to protection from discomfort and harm: Because this research was sensitive to adolescent mothers, I recruited the RAs with counseling skills to assist any study participant who might experience a mental health issue. In this case, the interview immediately stopped, and the appropriate protocol was followed. In any case where an emotional reaction was displayed, I met with the research participant to debrief them. To ensure study participants' safety, I made three follow-up calls after the interview, two weeks, and one month later.
- Assent, informed consent and participant authorization: This study recruited adolescent mothers who were not legally able to sign informed consent. This required them to sign an assent form and the guardian has signed the informed consent (Appendix G). I explained clearly the assent and informed consent forms to the adolescent mothers and their guardians. The research information letters were explained to them before informed consent is obtained. All forms were translated in Kinyarwanda, the mother tongue, so understanding was facilitated. The same procedure was applied to MCHWs, nurses and midwives, and KIs.
- Research risks and benefit: The study participants were explained that the first benefit of this study was to improve adolescent perinatal services by assessing how practices can be trauma and violence informed. In this study, the study participants experienced emotional response. However, the high risk interview

research protocol (Appendix F) was used to take care of the research participants. The participants were explained that they had the right to withdraw at any time they didn't feel comfortable to participate.

Summary of the Chapter

In the proposed study, I employed an ID methodology. I used purposive sampling to select adolescent mothers, MCHWs, nurses, midwives, and KIs to participate in-depth interviews with adolescent mothers guided by interview with invitational questions. I reviewed ANC and PMTCT guidelines.

Data collection was conducted concurrently with data analysis. Data were analyzed using a thematic framework employing six stages: data familiarization, generating initial codes, searching themes, reviewing themes, defining and naming themes, and producing the report. The credibility of this research was assessed using the following criteria: epistemological integrity, representative credibility, analytic logic, and interpretive authority. Other criteria taken into consideration in this study and in keeping with an ID methodology included moral defensibility, disciplinary relevance, pragmatic obligation, contextual awareness, and probable truth.

This study was approved by the Western University Health Science Ethics Board (HSREB, project ID: 119846) and the University of Rwanda, College of Medicine and Health Sciences Institutional Review Board (Approval Notice: No 330/CMHS IRB/2021). I sought permission from relevant authorities in Rwanda, i.e., Rwamagana district and health centers. Patient's rights were protected: right to self-determination, right to privacy, right to confidentiality, right to fair treatment, and right to protection from discomfort and harm. Assent forms and informed consent were negotiated from the study participants.

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Chapter Four: An Exploration of the Experiences of Adolescent Mothers Accessing Perinatal Services in Rwanda to Inform the Delivery of Trauma- and Violence-Informed Care: A Double-edged Sword

Abstract

Introduction: Adolescent pregnancies continue to be worrisome in low and middle income countries (LMICs). Adolescent mothers face several challenges when utilizing perinatal services, which can lead to re-traumatization due to their vulnerability, potential trauma histories, and ongoing violence.

Purpose: To explore and describe adolescent mothers' experiences accessing perinatal services in primary healthcare settings in Rwanda.

Methods: This study utilized an interpretive description (ID) methodology and was carried out in eight primary health care settings. Purposive sampling was used to recruit 15 adolescent mothers who accessed perinatal services to participate in an in-depth individual interview. Two relevant maternal-child health care guideline documents were also reviewed.

Results: Two themes were identified. While some young mothers had positive experiences related to the provision of unconditional support/care, emotional and psychological safety and strength-based practices, the majority encountered challenges and barriers which re-activated trauma, including interpersonal and forms of institutional and structural violence (e.g., care provision by male providers).

Conclusion: Adolescent mothers had mixed experiences accessing and using perinatal services, but these were mostly negative. It is important for perinatal services reflect the unique needs and especially the prior and ongoing traumatic experiences of adolescent mothers and to provide a supportive and non-judgmental care. This can

help ensure that adolescent mothers receive the care and resources they need to have a positive pregnancy and childbirth experience. A trauma- and violence-informed care (TVIC) approach is outlined to make perinatal services safe, supportive and inclusive.

Keywords: Adolescent mother, primary healthcare settings, trauma, structural violence, institutional violence, caring, trauma- and violence-informed care.

Background

Adolescent pregnancies continue to be a major public health and social concern in low- and middle-income countries (LMICs). Approximately 21 million women in developing regions become pregnant between the ages of 15 and 19, and approximately 12 million give birth each year to their first child (Sully et al., 2019). Compared to other parts of the globe, sub-Saharan Africa (SSA) has the highest prevalence of teen pregnancy (Ameyaw, 2018; Habitu et al., 2018; Human Rights Watch, 2018; Kaphagawani & Kalipeni, 2017; Omoro et al., 2018; Yakubu & Salisu, 2018) and nearly a quarter of these occur in the East African Community (EAC) (Kassa et al., 2018). According to the recent Rwanda Demographic Health Survey, 5% of the teen girls were pregnant or mothers (National Institute of Statistics of Rwanda [NISR] et al., 2020).

Adolescent mothers face several challenges that impact them physically and psychologically, and also affect the health of their children. A growing body of knowledge has found that adolescent mothers experience difficult times during and after pregnancy (Chemutai et al., 2020; Raj & Boehmer, 2013). According to the World Health Organization [WHO] (2018) parents, peers, and the entire community stigmatize, reject, and abuse adolescent mothers. In Rwanda, Ruzibiza (2020) conducted a study to explore the challenges that adolescents face after getting pregnant and post-delivery. Adolescent mothers reported that they experienced social stigma, family and community rejections, solitude and isolation. Similarly, in Brazil, it was found that adolescent mothers rarely receive support from their families and partners when pregnant and/or after delivery (Miura et al., 2018). Other scholars have reported the increase of domestic violence among adolescent mothers (Baran & Gumus, 2017; Belder-preston et al., 2013). All these challenges lead to poor mental

health outcomes in adolescent mothers (Clare & Yeh, 2012; Finkelhor et al., 2015; Ford et al., 2011; Hickman et al., 2012; Hodgkinson et al., 2014; Kingston et al., 2012) which in turn can impact their parenting (Hodgkinson et al., 2014). There is evidence that trauma is linked to poor mental health outcomes such as posttraumatic stress disorder (PTSD), depression, substance abuse, and suicide (Green et al., 2016; Katz & Gurtovenko, 2015). Trauma may be defined as either individual or complex. Individual trauma "results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional, or spiritual well-being" (SAMHSA, 2014 p. 7). According to the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5), trauma is defined as when an individual person is exposed "to actual or threatened death, serious injury, or sexual violence" (American Psychiatric Association, 2013 p. 271).

The prevalence of trauma among adolescent mothers is alarming. According to Killian-farrell et al. (2020) three out of four adolescent mothers experience at least one trauma and intimate partner violence (IPV). In addition, traumatization occurs most commonly among adolescent mothers through abuse before the age of 13 and/or the loss of a caregiver or sibling and many have been polytraumatized and have experienced emotional adversity. This is very important to take into consideration in the care of adolescent mothers since trauma harms the victim, their children, and surrounding people and can even lead to intergenerational trauma (Seng et al., 2013; Smith et al., 2014; WHO, 2020). Despite this substantial knowledge around trauma and its impact on adolescent mothers, healthcare providers and systems of care sometimes fail to recognize this which can lead to re-traumatization and unaddressed institutional violence. For example, when survivors of sexual abuse are undergoing

vaginal examinations, or are in labor, they may feel a loss of control and very vulnerable if this sexual trauma experience is re-activated. This can present in various ways, from dissociation to aggression, which can be mis-interpreted if health care providers are not aware of how trauma can be expressed (Montgomery, 2013; Elliott et al., 2005; Kezelman, 2016; Seng & Taylor, 2016; Gamble & Creedy, 2009). As a result of worries about re-traumatization, some women do not wish to disclose their trauma during perinatal care (Gokhale et al., 2020). Given how prevalent trauma is, especially in this group, the staff should treat all women as though they might have experienced trauma to avoid re-traumatization, i.e., assume a universal approach (Montgomery, 2013; Montgomery et al., 2015). Unfortunately, healthcare professionals in Rwanda are not exempt from these concerns (Mukamurigo et al., 2017). For example, Rurangirwa et al. (2018) documented a low level of knowledge regarding safe responses to survivors of sexual violence among nurses and midwives.

Additionally, several examples of disrespectful maternity care have been reported in Rwandan perinatal services (Miller et al., 2021; Mukamurigo et al., 2017; Rosen et al., 2015). Institutional factors can affect a teen mother who has experienced sexual violence. For example, at the first ANC visit in Rwanda, the client is required to bring either her husband or proof that he works outside of Kigali to obtain the services and get tested for HIV/AIDS (Hagey et al., 2014); this can sometimes be a long process or even re-traumatize the adolescent mother if she was sexually abused. These potentially harmful practices at both the individual and organizational/system levels call attention to the need for research and guidelines on how perinatal services in Rwanda can adopt trauma- and violence-informed care (TVIC) to better serve adolescent mothers.

TVIC is a health equity approach built on policies and practices that recognize that violence, including structural violence, trauma, health outcomes, and behaviours are interconnected (Wathen & Varcoe, 2019). Beyond “trauma-informed” practice, TVIC emphasizes that both structural and individual factors may cause trauma and that different groups experience violence differently (Browne et al., 2015). Thus, in perinatal care, adopting those approaches would improve the effectiveness of service delivery and treatment, prevent trauma, and reduce re-traumatization. While TVIC has been tested as part of an equity-oriented care intervention in primary care clinics in Canada (Browne et al., 2015; Ford-Gilboe et al., 2018), we are not aware of TVIC integration into primary healthcare perinatal services in Rwanda. We sought to explore how TVIC could be integrated in these services based on, as reported in this paper, clients' perspectives of care. Thus, through an interpretive description methodology, this study explored the experiences of adolescents who access perinatal services in Rwanda to inform the provision of trauma- and violence-informed care in primary healthcare settings.

Methodology

Study design

This study utilized an interpretive description (ID) methodology. Having realized the limitations of existing research designs, nursing scholar Sally Thorne developed this research design to assist nursing researchers in generating new knowledge applicable to their clinical practice (Thorne et al., 1997). According to Thorne et al. (2004) while ID uses similar tools to methodologies such as grounded theory, naturalistic inquiry, and ethnography, it offers practical solutions to clinical problems rather than focusing explicitly on developing theory (Thorne, 2016).

Study setting and population

This study was carried out in eight primary health care settings in the Rwamagana district, Eastern province of Rwanda. This area was chosen because it has the highest teenage pregnancy rate compared to other provinces (NISR et al., 2020). The study participants were 15 purposively selected adolescent mothers aged between 15 and19 years who accessed perinatal services (maternity care, ANC, or services to prevent mother to child HIV/AIDS transmission [PMTCT]) in one of the eight clinics, and who could share their various experiences with these services. In addition, two practice protocols were reviewed.

Data collection procedures

After gaining Research Ethics Board approval from the University of Western Ontario and the University of Rwanda, I proceeded to the Rwamagana District to request permission to access the field. After getting permission, I identified the head of the health centers (HCs), presented the authorization request letter, and discussed the nature of the study. I explained the research study and the inclusion criteria to adolescent mothers. In addition to leaving my contact information, I left an advertisement at the health centers and with community health workers (CHWs) so that anyone interested could get in touch with me and come to the health center with their legal guardians.

Considering the social location of the study participants, the female research assistants (RAs) were hired to ensure that the adolescent mothers express themselves freely (Dixon, 2015; Krueger & Casey, 2015; Samuels et al., 2015). The RAs were trained on the study, interview guides, interviewing skills, situating themselves in the research role, exercising reflexivity, ID, and TVIC. Adolescent mothers aged between

15-18 years signed an assent, and their legal guardians signed an informed consent. Adolescent mothers over 18-year-old signed informed consent forms. Legal guardians were biological parents; however, community consent can be obtained from leaders, religious individuals, older siblings, and even teachers depending on the context (Vreeman et al., 2012). A $10 CAD honorarium (8,000 Rwandan franc) fee was given to each study participant to compensate for time, meal, transport, and communication. ID capitalizes on the in-depth interview to explore clinical issues as a useful core for knowledge development (Thorne, 2016). As opposed to focus groups, this method allows the research participants to freely share their stories or "tell their own story," resulting in more significant variations (Thorne, 2016 p. 91). The interview was in Kinyarwanda and recorded with the study participants' permission. An interview guide with invitational questions was developed by the research team and interviews were conducted in a safe and private space. The average length of the interview was 43mins.

Data construction and analysis

Data collection and analysis were conducted concurrently because one informs another iteratively. Data were transcribed verbatim and translated in English. As opposed to other traditional qualitative research methods, ID acknowledges existing clinical patterns, theoretical knowledge, and scientific facts that can be used to generate health research (Thorne et al., 2004). Analyzing the data in this manner constitutes the preliminary analytic process and determines the sampling method, design, and analytic decisions to be made. Data were sorted and organized using Dedoose software. thematic analysis (Braun & Clarke, 2006), was employed through data familiarization, generating initial codes, searching themes, reviewing themes, defining and naming themes, and producing the report. Four evaluation standards for

ID studies including epistemological integrity, representative credibility, analytic logic, and interpretive authority (Thorne, 2016) were used to ensure the data credibility.

Findings

Table 4.1 describes the socio-demographic of the 15 participating adolescent mothers, the majority of whom were aged 18 years old and had at least two years' primary education.

Table 4.1. Socio-demographic characteristics of adolescent mothers

No.	Pseudonyms	Age	Level of education
1.	AMA	18	Primary 3
2.	AMB	17	Primary 6
3.	AMC	17	Primary 5
4.	AMD	19	Primary 6
5.	AME	18	Primary 2
6.	AMF	18	Primary 5
7.	AMG	17	Primary 6
8.	AMH	19	Did not attend the school
9.	AMI	17	Senior 2
10.	AMJ	18	Senior 2
11.	AMK	18	Primary 6
12.	AML	18	Primary 6
13.	AMM	18	Primary 5
14.	AMN	16	Primary 5
15.	AMO	15	Senior 2

Documents Review

Two documents were reviewed including the 2020 national ANC guideline and a 2010 training module for MCHWs in the context of home based maternal and child care – these are described in (Appendix O). The ANC guidelines emphasize the quality of care and the roles of healthcare professionals in supporting pregnant women. Special considerations for caring for an adolescent mother have been highlighted—however, the information provided was minimal. The document

encourages screening for violence and abuse, sexual abuse, trauma or childhood maltreatment and IPV. I also found that the ANC guideline refers to the term husband or partner throughout the document. There is no specific component for caring for adolescent mothers in the home-based maternal and child care training module for MCHWs. Training case studies are adult focused. The document provides general information and uses the term husband throughout.

Themes

The findings of the study suggest that access to perinatal services is a double-edged sword for adolescent mothers, i.e., participants reported mixed experiences when accessing and utilizing perinatal services, with tailored care on the one hand and experiences of re-traumatization on the other. Two overriding themes were identified with sub-themes including: a) tailored care and three sub-themes (unconditional support/care, emotional and psychological safety, and strength-based practices); and b) the re-creation of trauma and two subthemes (Interpersonal violence, and institutional and structural violence) (Table 4.2). It is clear from the field notes that the interviews were sometimes difficult for both adolescent mothers and the RAs interviewing them. After several interviews, the RAs shared their observations and reactions with the researcher (myself). Some participants preferred not to be recorded for a few minutes, and others were afraid of speaking at all, particularly related to speaking about the healthcare system operations and the negative actions of nurses and midwives.

Table 4.2. Major themes and Sub-themes

Themes	Sub-themes
Tailored care	Unconditional support/care Emotional and psychological safety Strength-based practices
The re-creation of trauma	Interpersonal violence Institutional and structural violence

Theme 1: Tailored Care

A few adolescent mothers reported that due to the lack sufficient knowledge and skills for successful maternal role as new and young mothers, Maternal Community Health Workers (MCHWs), nurses and midwives supported them unconditionally, provided emotional and psychological safety and focused on strength-based practices.

Unconditional Support/Care. Some adolescent mothers reported that there were nurses, midwives and MCHWs who helped them access and utilize perinatal services despite their challenges. Some feared community stigma and were living in remote areas so it was particularly challenging to reach health centers. For example, one said:

> *Since I knew I was pregnant, I did not want to go outside our home because I was ashamed and afraid of people laughing at me. My parents were mad at me. The MCHW told me to go to the health center twice, and I refused. There is a nurse/midwife who came together with that MCHW and taught me the negative consequences of not attending ante-natal care. They explained to me how they would help me. Then, I agreed. I thank[ed] them for not giving up on me.* (AMJ)

Another adolescent said that after delivery, she was followed up by the MCHWs to make sure that she was able to take care of her baby, as she noted: *"They [MCHWs] frequently visited me many times and closely took care of the baby till now. My home was not easy to access and I could not reach them easily. I can say they really care[d] for me without any problem."* (AML) The reviewed National Antenatal

Care (ANC) Guideline (ANC, 2020) underlines that the MCHW should identify and encourage pregnant adolescents to utilize ante-natal clinic services. The standard visits are limited to three and as noted in the quotes above, frequent follow-ups of adolescent mothers by MCHWs was important to allow sufficient time for meaningful engagement between the MCHWs and the adolescent mothers to encourage perinatal services utilization.

Emotional and Psychological Safety. A few adolescent mothers mentioned that, because they were not psychologically stable during pregnancy and after delivery, nurses and midwives in perinatal services ensured they were psychologically safe, for example, as one participant noted:

> *I had a lot going in my mind. I was very much stressed and traumatized. So, whenever I had pain and screamed, the healthcare provider used to tell me to stay calm and that everything would be alright. She showed me what to do to minimize the pain I had. She encouraged me to speak out whenever I had a problem and that I would not be blamed for expressing myself. She told me that she was there to make sure that I felt comfortable not hurting me. (*AMG)

Similarly, another participant emphasized:

> *The most remarkable thing about it was how they [healthcare providers and MCHWs] gave me love without [us] knowing each other. In the first place, I was hopeless and thought that no one was thinking about me. No one was talking to me in my neighborhood, [not] even my parents. However, they [healthcare providers and MCHWs] were talking to me nicely by saying: "Is the baby okay in the belly?" even the MCHWs passing by my home asked: "How did you sleep? How are you today?" I was happy with it.* (AMI)

In the first quote, the healthcare provider was sensitive to the pain of delivery and used supportive language and practices to create a recovery environment and ensure that the adolescent mother could cope. In the second quote, a MCHW integrates cultural values in caring for the adolescent mother. For example, in Rwanda, it's culturally recommended to pass by someone's house and greet them to show love and make them feel that there is someone who thinks about them.

Strength-Based Practices. Some nurses and midwives also assisted adolescent mothers in other ways. For example, as one young woman said:

> *(Laughing) so funny! I jumped off the birthing bed when I was about to give birth. However, the healthcare provider reassured me that I should be optimistic and that everything would be okay. She told me that even though I was going to give birth at a young age, I would make it like other mothers did. She was nice to me. Look now, I am a mother, as she said.* (AML)

Another adolescent mother emphasized:

> *I remember a healthcare provider told me to push and I could not do it as she wanted me to do but she encouraged me that to have a healthy baby I have to be involved and help the healthcare providers with my efforts. She explained how and why I had to push. She told[me] that I have been so good and [to try], so that was simple to me. She added that if we work together we would make it. I tried my best and [am] happy that I got a healthy baby.* (AME)

In the above quotes, the healthcare providers involved adolescent mothers in their care and the care of their baby and provided clear explanations to them. This exemplifies how building partnerships in perinatal care with adolescent mothers can lead to positive outcomes. As reported by the adolescent mother, that partnership resulted in increased confidence and strength.

Theme 2: The Re-creation of Trauma

Most adolescent mothers in this study also reported negative experiences when accessing and utilizing perinatal services. These experiences resulted in the re-creation of trauma caused primarily by interpersonal violence and structural and institutional barriers. The gender of the healthcare provider (i.e., being male) was also traumatic for some adolescent mothers.

Gender-Based/Interpersonal Violence. A few adolescent mothers reported experiences of disrespectful and judgmental care, ageist behaviors of nurses and midwives, stigma and discrimination, enforced reproductive interventions, and a breach of confidentiality by healthcare providers and MCHWs. This was particularly

traumatic for some participants who also had experienced rape that resulted in their pregnancy. For example, an adolescent mother who had been raped and did not know she was pregnant for a couple of months recounts an experience in the health care setting as follows:

> *They [nurse/midwife] slapped my thigh and angrily told me that she was not the one who told me to give birth when I was still young. She told me to spread my legs and feel how it is to give birth at a young age. She called another nurse/midwife because there was a time I could not bear with pain; it was hurting, and the anesthesia she used didn't work. I could not let her continue. She told that nurse that this child is difficult to manage and does not need her incision to be repaired. She left and did not even inform the new [nurse] that she left a cotton ball in me.* (AMM)

This situation was particularly traumatizing for this young mother because of her early rape experience. Here the nurse/midwife not only disregarded her pain but also her actions were discriminatory based on the adolescent's age. Another participant reported being asked about her partner when she accessed care and when she said she didn't have one, she was told the following: "*She said,* '*hurry up and bring your husband because you weren't impregnated by a tree.' Do you understand how it sounds or feels? I didn't appreciate it because it really hurt me. That is something I won't forget."* (AME) Again, this adolescent was judged by the nurse for not having a partner, which she experienced as re-traumatizing. In the reviewed ANC (2020) guidelines, it is well documented that health care providers should provide non-judgmental care to ensure that an adolescent mother is comfortable. However, as this quote reflects, this was not always the case.

Another very young participant whose pregnancy was the result of a rape by an older adult who was her neighbor reported that while she was in the washroom at the health center a healthcare provider called the names of all the mothers attending. When she returned, the healthcare provider said: *"Like you, where were you going? At your age, are you allowed to give birth?"* When she wanted to explain why it

happened, she [the healthcare provider] spoke angrily and loudly: *"I can't understand that; you have to be accountable for your inappropriate behaviors. Sit down there."* When asked how she felt after that, she replied: *"I accepted because I am young, but they should know that I did not choose to be who I am today. It happened like this. I do not think she would have said that if it were an adult woman, hmm."* (AMG)

Most of the adolescent mothers also highlighted ageist behaviors among nurses and midwives which led to inequalities in perinatal services utilization. They reported that sometimes they were blamed for being pregnant at a young age. Negative attitudes towards pregnancy of a young person, even if it was rape-related, was noted by several participants in this study. Trauma was often re-created in these circumstances, for example:

> *When good-looking ladies [ladies from wealthier classes] come to these services, they are well welcomed. When you are a child/adolescent or poor, they would tell you to move [to the back] simply because you are young, and they first welcome and serve those good-looking women. It happened to me, and I should have been served first when I arrived at the health center before them.* (AME)

As is the case in this interview narrative, many participants perceived that because they were young, nurses and midwives disregarded normal protocols, placing them at a disadvantage. In addition, they perceived that because they were poor, they were neglected because of their physical appearance. Here ageism and poverty intersected to further disadvantage these young women.

A few participants shared their experiences regarding their limited choice in terms of some treatments and procedures. For example, one reported:

> *This family planning thing; they don't let you choose what you want among the family planning methods available…. Hmmm…they install it [IUD] without asking you what you want. We already know they have had pills, injections, and IUDs for three or five years. But I did not choose. The healthcare provider told me, 'this is what is appropriate for you.* (AMG)

Forced treatment was identified as a central finding in this study. In this case the healthcare provider did not involve this young woman in the decision-making related to family planning; instead, they chose what they deemed as appropriate for her. Even though this adolescent mother had information on the existing family planning methods, the adolescent felt the nurse/midwife could have explained more about the available methods so she could make an informed decision. Another participant shared a similar experience when she visited the ante-natal clinic:

> *They [nurse/midwife] gave me an injection, but I did not know what kind of medicine it was because they did not tell me the name or what it was for, but they also gave me other pills. They explained that I had to take pills because I had become weak.* (AMM)

Here the provider provided a medication without informing the patient; a potential breach of the informed consent process as recommended by the reviewed ANC guideline of 2020.

Another participant reported telling a MCHW that she was probably pregnant because she had sex and started to have signs of pregnancy and in particular, morning sickness; she asked that this be kept secret because she had not told her mother. The participant relayed the following:

> *But the [M]CHW told my mom immediately. A nurse/midwife who examined me was a friend of my mom, and she immediately told her too. That's so sad because it should be confidential until I give them permission to tell her or I do it myself.* (AMK)

Under the special considerations section re: the management of the pregnant adolescent in the ANC (2020) guideline document it notes that nurses and midwives should *"ensure confidentiality."* Another adolescent shared a similar experience:

> *When some people started gossiping about my pregnancy, a MCHW approached and asked me about that. I said I was not pregnant. She insisted, then I told her that I was pregnant and she had to keep this a secret because I did not want my parents to know about this soon. She promised to keep a secret. Unfortunately, the following day, she told everyone in the village, and my parents knew it and created conflicts.* (AMH)

In the above quotes, both MCHWs and a nurse/midwife failed to uphold their ethical obligations to their young patients. Confidentiality is an essential element in promoting psychological and emotional safety and forming trust with the health care provider and patient relationship. Understandably, this young mother lost trust in t care providers, which could impact her ability to access care in the future.

Institutional and Structural Violence. In this study, adolescent mothers reported experiences that perpetuated inequity and led to preventable suffering due to the gender of the healthcare provider, inflexible systems of care and injustices embedded in perinatal services. These barriers included the mandatory requirement to bring their 'husband' to the first visit at the ANC clinic and present their community health insurance card.

The gender of the healthcare provider held particular significance for many of the adolescent mothers given their previous experiences with men. For example, a participant from a low-income family related that she was manipulated by an adult man promising to help her with school materials. She agreed to have sex with him, and she found herself pregnant. The man did not support her when she told him she was pregnant. She said that whenever she tried to tell him what had happened, the man laughed at her, saying he was not the only man who could impregnate her. He told her she was an idiot to trust and allow every man to sleep with her. Since then, she felt embarrassed and decided not to trust men anymore. When accessing perinatal services, she shared her experience with different healthcare providers:

> *In ANC, I used to be helped by females. They gave good service and talked to me nicely. During examination and delivery, because it was a male nurse/midwife, I felt embarrassed and wanted to tell them not to do so. I would not say I liked it. I used to be examined by women and felt comfortable with them. I did not trust men; I thought they would laugh at me or do something else.* (AMO)

She continued saying:

> *He did a vaginal examination. He just told me to lie down on the bed. That's why I felt uncomfortable because I did not know what was happening. He cleaned outside, inserted the fingers, and said I was at six. However, when I felt surprised and worried about what was going on, he immediately said do not worry; I am examining you this way.*

Based on this participant's narratives, it is understandable that the participant had trust issues with male healthcare providers because of the man who abused her. When this adolescent was asked what she meant by "do something else," she laughed and decided to leave it. In the second quote, the participant expressed her concern regarding the lack of explanation related to what the male healthcare was about to do. It seems he explained amid the procedure when he realized this young woman was worried about being examined.

A different participant described abuse by her employer. On the day of paying her salary, her employer said that he didn't have her payment with him and that she should come to his place to pick it up. When she arrived there, there were drinks and food. She took food and something to drink, then fell unconscious and lost her memory of what happened next. After several months she started feeling unwell and remembered that her employer had told her friend that he had raped her while she was drunk and unconscious. After the young woman discovered she was pregnant, she told the employer, who refused to admit what he had done. As a result, she had to leave her home to live with her grandmother for a few months. When asked about her experiences in perinatal services, she said that she doesn't remember much because she accessed them so late, at 8 months. However, she said, *"during delivery, I saw a male healthcare provider coming in the room and felt some goosebumps. Fortunately, he was passing to another area."* When asked why, she added, *"I don't know, but I would not let him touch me."* (AMF) This adolescent mother felt unsafe when seeing a

man in the ward. In both these cases, participants expressed feeling unsafe seeing a male healthcare provider, linked, it seems, to their experiences of sexual violence by men they knew. The personal experiences and social conditions that women bring with them into peri-natal care interactions interact with how care is provided by MCHWs, nurse, midwives and other professionals.

Adolescent mothers reported that the first time they went to the health center, a nurse/midwife requested they bring their partner to get tested for HIV/AIDS and STDs, not taking into account that some, even many, pregnant adolescents may not have a husband or partner. This participant shared her experience when she attended the ANC for the first time, reporting quite emotionally, "*When I reached the health center for the first time, [the] nurse/midwife told me that before being admitted and getting a client's file, I had to bring my husband. I told them I don't have a husband, and he even abandoned me."* (AME) When asked how she felt, she added, *"I felt it hurt badly because I had no longer seen him since he impregnated me. When they asked me about that, and I remembered that I never saw him, I felt sad, but I accepted it."* (AME) Presenting a partner, a husband, or a biological father of the baby was a barrier faced by the majority of adolescent mothers in this study. They stated that being asked to bring a partner who did not support them or who rejected, or even assaulted them was re-traumatizing. Sometimes nurses and midwives called them "husbands," which also was upsetting, for example, "*It feels bad to be asked [about] someone who did not support you. It does not feel good even to understand a healthcare provider calling him a husband and how she reacted when I told her that I don't have a husband. Is he really a husband?"* (AME). The use of the term "husband" can harm adolescent mothers who have been rejected or abused by the men who impregnated them.

Some participants reported having to return to the community to bring a document from either the MCHW or the executive secretary of the cell (entity involved in community mobilization and data reporting), confirming that they could not find the man who impregnated them. One said, *"I had to return to bring the copy, which confirmed that I did not have a husband. I got it from the executive of the village. After presenting it to the healthcare providers, they received and took care of me like other mothers."* (AMG) When asked how they felt when were sent back home or if they had requested any help, they replied that nurses and midwives say that they had to comply with the rules and regulations governing their procedures in perinatal services. Participant AME mentioned, "*They insisted, saying that is how they work, and sadly I had to go back home."* Another noted the following:

> *What could I do? According to the nurse/midwife's facial reaction, it was an order. I must accept it as she told me; I would have added nothing more to that. She told me to go to our community health worker to get a copy of the statement written by her.* (AMG)

The ANC (2020) guideline emphasizes that male partner involvement is a good practice and that every pregnant woman should be tested for HIV together with the male partner/father. Understandably, this 'must-have' documentation may affect young women's perinatal service access and utilization. One noted, *"The next visit, I was afraid to come back to the health center, but the community health worker approached and encouraged me to go back. She even escorted and introduced me to the nurses and midwives."* (AMK) Other participants lost trust in nurses and midwives and felt unsafe in the healthcare environment. For example, one mentioned:

> *I assumed that nurses and midwives didn't like me…I felt that the nurses and midwives were mad at me. Asking me for a husband was something I did not expect. Beyond that, he rejected me, so why would they ask me that or deny receiving me? In addition, I did not have money. So, I felt comfortable not going back.* (AML)

It is understandable that these participants were distressed when they were forced to pay additional costs of transport as well as taking the extra time, and then being sent back to their communities. In general, adolescent mothers face varying degrees of trauma, stigma, discrimination, and shunning/ostracization, and this may depend on how they became pregnant, including by rape. These factors will intersect with social and systemic factors – including community and clinic protocols - to influence whether and how these young women will seek care.

In Rwanda, a person receives community health insurance when all family members pay the required amount in full, and this must be presented at the clinic. Some participants reported not being able to afford community health insurance, which impacted their ability to get healthcare services. One participant reported that her mother and step-father abandoned her the first day they learned she was pregnant and she ended up living on the streets. The following quote illustrates her experience when accessing the perinatal care for the first time:

> *After realizing that I was pregnant, I went to the health center, and they asked me to bring community health insurance. I said I did not have one. They told me to go to the community health workers for a written note proving that they would take care of me. The MCHW took me back to the health center without health insurance to try if they could receive me, but they refused to serve me. The MCHW left me there alone. She left me there, then they asked for community-based health insurance very often. Eventually, they told me I had to pay 100% and I could not afford it. They told me that to be served, it is a policy to have a community-based health insurance, yeah. The healthcare provider did not ask me anything else unless I went back to find money.* (AMJ)

Given family issues and socioeconomic status presenting community health insurance was challenging for many adolescent mothers in this study, who noted it as a main barrier to accessing perinatal care, either making care inaccessible, as noted above, or very difficult to find, as this participant indicates, *"So, a friend of mine who*

had the same story as mine of how they refused to take care of her …without money, advised me to change the location. Thus, I went there [another health center] and they received me." (AMJ) This also demonstrates inconsistencies across health centers in their willingness to receive adolescents without community health insurance in perinatal services. Another participant said that right after giving birth, because she did not have money to pay the bills, she was left alone in the room as mothers are not discharged until they pay their fees. Staff passed by, not speaking with her, nor offering food. She noted that when someone is miserable, healthcare providers should not ignore them. In this case, her own mother rejected her, telling her to go and get married to the man who had abused her. Another participant in a similar situation said*; "I couldn't check out when I was discharged. Honestly, I fled from the healthcare facility. That was the only thing I could do since no one could help me."* (AMH)

Discussion

In this study we explored adolescent mothers' experiences of accessing and utilizing perinatal services, with participants reporting some positive, but also some very negative experiences. Two overarching themes were identified: tailored care, and the re-activation of previous trauma, along with new experiences of trauma.

It was reported that some adolescent mothers who participated in this study felt supported by their MCHWs, nurses, and midwives throughout their pregnancy and motherhood. During perinatal services, adolescent mothers appreciated health education topics such as breastfeeding and nutrition they received as young and new mothers. Supportive care among adolescent mothers was also reported in other studies (Bwalya et al., 2018; Chikalipo et al., 2018; Sewpaul et al., 2021). MCHWs, nurses, and midwives advocate on behalf of adolescent mothers to gain access to various

resources. While MCHWs had difficulty reaching adolescent mothers due to their geographical location, adolescent mothers reported that MCHWs visited their homes frequently and regularly to monitor their health. These findings are consistent with other Australian study (Shee et al., 2021) and frequent visits are recommended by WHO to ensure a positive pregnancy experience (WHO, 2016). Adolescent mothers value follow-up as a critical element of accessing and engaging in prenatal care. It was beneficial to the adolescent mothers to have a nurse, midwife, or MCHW contact them and follow up with them one-on-one. In addition to the adolescent mothers' experience, they were grateful for the staff who got to know them (Shee et al., 2021). Follow-up in perinatal services is a strategy used by perinatal healthcare professionals to improve maternal and neonatal outcomes. It enhances perinatal clients' experiences, improves breastfeeding practices, and reduces costs associated with childbearing (Donnellan-Fernandez et al., 2018; McLachlan et al., 2016; Sandall et al., 2016).

It was reported by a few adolescent mothers that they felt safe during pregnancy and during/after delivery. In a study Quosdorf et al. (2020), adolescent mothers reported that nurses and midwives empowered them during delivery through establishing partnership, which is similar to findings from a study in Uganda (Manhica et al., 2021). Based on the results of this study by Manhica et al., 2021, it was concluded that health workers could promote health and well-being among adolescent mothers by providing person-centered care, including empowerment strategies as part of the process. Empowering a woman during maternity care contributes to her satisfaction with birth. It also contributes to recovery from previous trauma, improving health outcomes, enhancing her self-confidence and emotional

well-being, strengthening her capacities for advocating for herself, and improving access and utilization of maternity services (Nieuwenhuijze & Leahy-warren, 2019).

From the adolescent mothers' accounts in the present study, there was a re-activation of previous traumatic experiences, as well as creation of new trauma related to both healthcare professionals' actions, and systemic/structural factors. During interactions with healthcare professionals, most adolescent mothers experience trauma memories (Millar et al., 2021). In the present study, participants reported experiencing interpersonal violence from perinatal nurses and midwives, including one woman who was slapped on the leg, and many who reported emotional abuse in the form of disrespectful and judgmental care, including being examined without permission, and treated (e.g., with contraceptives) without consent, a finding consistent with other studies in the Rwandan context (Crooks et al., 2022; Miller et al., 2021; Mukamurigo et al., 2017; Mweteni et al., 2021; Rosen et al., 2015). Similarly, our participants described stigmatizing attitudes and stereotypes from nurses and midwives, such as being blamed for getting pregnant at a young age. These findings are similar to other studies conducted in different countries (Apolot et al., 2020; Bwalya et al., 2018; Erasmus et al., 2020; Govender et al., 2019, 2020b; Henning et al., 2020; Kola et al., 2020; Mweteni et al., 2021; Rukundo et al., 2019; Rurangirwa et al., 2018; Sewpaul et al., 2021). In this study, some participants described being overlooked for services by nurses and midwives because of their physical appearance as young and poor, which is consistent with other research (Hackett et al., 2019).

As noted, few participants reported enforced reproductive health interventions such as post-partum family planning methods, which are common and can have serious negative consequences for individuals and communities, including physical

harm, emotional trauma, and violation of human rights. These interventions can also undermine trust in health care systems and discourage people from seeking reproductive health services (Bakare & Gentz, 2020; Ko, 2020; Leason, 2021; Stote, 2022). Adolescent mothers in LMICs often face significant challenges when it comes to autonomy and informed decision-making. These challenges can stem from a range of social, cultural, and economic factors (Crooks et al., 2022). It is essential to recognize that adolescent mothers' lack of autonomy and decision-making power can be attributed to social norms and gender inequalities.

According to some of our participants, MCHWs, nurses, and midwives revealed their confidential pregnancy information to the community. When confidentiality is breached, it can lead to significant barriers to accessing and utilizing perinatal services. Adolescent mothers may be less likely to seek care if they feel that their privacy will not be respected (Bwalya et al., 2018; Hackett et al., 2019; Henning et al., 2020). This can result in missed opportunities for early detection and treatment of complications, leading to poorer maternal and fetal outcomes. In some cases, midwives, nurses, and MCHWs involved parents and other local leaders when adolescent mothers were not yet ready to talk about their pregnancy. Involving parents in adolescent mothers' care can potentially lead to disempowerment and loss of confidence, but it depends on the specific circumstances and approach (Wilson et al., 2009). However, nurses and midwives from Jamaica reported, due to adolescent mothers’ unique challenges and background, that it is very important to respect their right to privacy and ensure that their personal information is not disclosed without their consent (Wilson-Mitchell et al., 2018).

In the present study, care by a male midwife or nurse was perceived to be unsafe for a few participants, specifically those who had become pregnant through sexual assault. According to another study, adolescent mothers are less open to male than to female healthcare providers. Some of these adolescent mothers even changed healthcare facilities regardless of the kindness of their male healthcare providers (Henning et al., 2020). In Canada, adolescent mothers felt more comfortable being examined by a female healthcare provider for vaginal examinations, which is a common preference among women (Millar et al., 2021). It's important to note that an adolescent mother's preferences for healthcare providers can vary widely and can be influenced by a number of factors, including cultural background, personal experience, and individual comfort level. The healthcare team must listen to the concerns of an adolescent mother if she expresses feeling unsafe or uncomfortable with a male healthcare provider. Accommodations should be made to ensure she receives care from a provider she feels comfortable with.

In this study, adolescent mothers reported structural barriers that perpetuated systemic inequalities and limited the resources and opportunities available to them. For example, most adolescent mothers reported being asked to present with their husbands/partners when they visited a healthcare facility for the first time after learning they were pregnant. First, it is documented most adolescent mothers in Rwanda not impregnated by rape are abandoned by their partners after they become pregnant (UN Women, 2021; UNFPA, 2021). According to the Rwanda Penal Code of 2018, sexual contact with a child under 18 is subject to deterrents or punishments regardless of whether the child consents. Whenever child defilement occurs on a child under 14 years, life imprisonment is the penalty, which circumstances cannot mitigate (Rwanda Official Gazette No. Special of 27/09/2018, Section 6, 2018). As a result of

adolescent pregnancy criminalization in Rwanda, adolescent mothers choose to remain silent about their partners in order to continue to receive support (Cressey et al., 2020). Several participants in our study reported having to return to their villages to bring a letter from the village executive secretary or a MCHW confirming that the partner/father was not present; this was experienced as re-traumatizing since, first, their partners abandoned them and, second, nurses and midwives called them "husbands" while they were not (and then judged them harshly for not having husbands). Presenting a partner at the first perinatal visit to receive services was also reported in other studies (Apolot et al., 2020; Hackett et al., 2019; Påfs et al., 2016). It's essential to recognize that not all adolescent mothers have 'partners' or are in a position to involve the men who impregnated them in perinatal services. Additionally, some adolescent mothers may have experienced trauma related to their pregnancy, such as abandonment or coercion. Another structural barrier for adolescent mothers was being required to present community-based health insurance (CBHI) in the primary healthcare setting. It is believed that CBHI programs can increase the utilization of maternal healthcare services, including prenatal care, delivery services, and postnatal care (Hagey et al., 2014; Sserwanja et al., 2022). To obtain CBHI, people (families) can pool their resources to receive coverage and medical care. The program aims to ensure that low-income people can afford medical care. Membership come into effect when each household member pays the required contribution (Rwanda Social Security Board [RSSB], 2023). However, adolescent mothers are usually ostracized and denied support from their families, communities, and partners, which can make their situation more challenging (Apolot et al., 2020; Bhana & Nkani, 2016; Govender et al., 2020a; Mashala et al., 2012). Thus, many could not afford the CBHI which costs 3,000 Rwandan francs per year. Due to these structural

barriers, some adolescents changed their primary healthcare setting if they could not find these must-have copies. The fact that some young women did find care at some clinics even without an insurance card shows inconsistencies in primary healthcare settings' guidelines and procedures. Another study also reported similar inconsistencies in policies and practices in Rwanda, Ghana and Tanzania (Hackett et al., 2019; Kalisa et al., 2018). According to the present study, stigma among healthcare providers and structural barriers prevented some adolescent mothers from accessing and using perinatal services. Even though these findings are in agreement with those of other studies conducted in other settings (Erasmus et al., 2020; Govender et al., 2020a; Sewpaul et al., 2021), in other studies, adolescent mothers felt that perinatal care offered them the most safety due to the support provided by midwives and the relationships they developed with them (Crooks et al., 2022; Shee et al., 2021).

Even though some thematic findings aligned with the two reviewed guidelines documents, other practices did not align with those documents. In addition, some practices highlighted in the documents could also cause re-traumatization. Generally, the standards of care were not met (as reported by young women) and this indicates the need to establish perinatal services guided by TVIC principles so that the young women receive safe and respectful care. Taking care of survivors of gender-based violence, TVIC strives to prevent further harm, primarily through policies and practices that are safe for them (Wathen & Varcoe, 2019).

Conclusion

Adolescent mothers had mixed experiences accessing and using perinatal services in Rwanda. While some had positive experiences, others encountered challenges and barriers that can affect their well-being and that of their child. The

study participants' narratives revealed that MCHWs, nurses and midwives supported adolescent mothers through continuity of care, emotional and psychological support, and empowerment. Most adolescent mothers in this study reported negative experiences when accessing and utilizing perinatal services, and these experiences resulted in re-creation of trauma. This study's leading causes of re-traumatization were interpersonal violence, structural and institutional barriers, and the gender of the healthcare provider (being a male healthcare provider). It is important for perinatal services to take into account the unique needs and experiences of adolescent mothers and to provide a supportive and non-judgmental environment. This can help ensure that adolescent mothers receive the care and resources they need to have a positive pregnancy and childbirth experience and to support their child's health and development. Therefore, it is necessary to make perinatal services safe, supportive and inclusive by translating TVIC into practice.

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Chapter Five: "…It is challenging and time consuming…": Experiences of Nurses, and Midwives Caring for Adolescent Mothers in the Perinatal Period in Primary Health Care Settings in Rwanda

Abstract

Introduction: Nurses and midwives play an important role in providing maternal and child health care to adolescent mothers. Health care is a priority for all adolescent moms, as they face unique challenges and require specialized care to ensure their health and their children's health.

Purpose: To explore the experiences of nurses and midwives working with adolescent mothers in the selected healthcare centers in Rwanda to inform the delivery of trauma- and violence- informed care (TVIC).

Methods: This study utilized interpretive description (ID) and was conducted in the eight selected primary healthcare settings. Twelve nurses and midwives and seven key informants (managers of the health centers and community health officers) participated in in-depth individual interviews. Data were organized by Dedoose and analyzed using thematic analysis. University of Western Ontario Research Ethics Board and University of Rwanda Institutional Review Board approved the study.

Results: Four main themes with 11 sub-themes were identified including relational practice (being creative and flexible, lending their ears), perceived individual challenges of caring (lack of knowledge and skills to care for adolescent mothers, and gendered experience), use of workarounds (inflexible guidelines, lack of protocols and procedures, limited nurses' and midwives' training, and perinatal environment), and vicarious trauma (living the feelings, "I carry their stories home," and authoritarian parenting).

Conclusion: Nurses and midwives reported that caring for adolescent mothers is challenging due to their complex needs. Caring for adolescent mothers is emotionally draining for nurses and midwives. Therefore, the government must prioritize strategies and interventions to make perinatal services safe and welcoming for adolescent mothers and providers including providing trauma- and violence-informed care training to nurses and midwives, developing special protocols and policies for adolescent mothers, and proving resources to mitigate vicarious trauma.

Keywords: Adolescent mother, nurse, midwives, perinatal, primary care settings, trauma and violence informed care, structural violence.

Background

Preventing pregnancy among adolescents and pregnancy-related mortality and morbidity are foundational to achieving positive health outcomes across the life course and have the potential to contribute to the achievement of the Sustainable Development Goals (SDGs) that concern maternal and newborn health (World Health Organization [WHO], 2022). It is difficult for adolescent mothers, especially during pregnancy and postpartum, to cope with the changes to their lives and fear of the unknown. Additionally, they face extreme hardships as parents, as well as negative treatment from family and other members of the community (Chemutai et al., 2020; Raj & Boehmer, 2013). Teenage pregnancy is associated with many traumatic events, as well as psychological impairment and stress (Finkelhor et al., 2015; Ford et al., 2011; Hickman et al., 2012). As a result, adolescent mothers are more likely to develop mental health problems, including PTSD, depression, and anxiety, than their peers without children or adult mothers (Clare & Yeh, 2012; Kingston et al., 2012). It is well documented that that trauma is linked to poor mental health outcomes such as PTSD, depression, substance abuse, and suicide (Green et al., 2016; Katz & Gurtovenko, 2015), which calls us to pay particular attention to the care and support of adolescent mothers. According to Wathen & Varcoe (2019), "Trauma can also result from what does not happen, for example, when systems fail to recognize and intervene in gender-based violence and its related causes and consequences" (p. 3). Thus, systems of care need to adopt trauma- and violence- informed approaches to be able to adequately address the needs of adolescent mothers.

A growing body of knowledge stresses the need for trauma-informed health services among nurses (Kassam-adams et al., 2015; Muskett, 2014; Stokes et al., 2017). Different scholars have shown the importance of incorporating trauma-

informed approaches in perinatal services (Choi & Seng, 2015; Seng & Taylor, 2016; Sperlich et al., 2017); in particular adolescent mothers would benefit from them.

Perinatal nurses and midwives have different experiences when working with adolescent mothers. For example, in Canada, perinatal nurses reported that they deliver a positive experience and ensure that adolescent mothers and their babies feel safe. They achieve this through non-judgmental approach, developing therapeutic relationship, and adjusting care according to the adolescents' needs (Quosdorf et al., 2020). A study conducted in Jamaica revealed that several midwives had negative or neutral attitudes towards adolescent mothers (Agu et al., 2017). In the same country, several factors that affected the quality of care provided by health providers towards the provision of respectful maternity care for adolescent mothers included midwives' personal beliefs, individual personalities, inadequate staff orientation, and a lack of collaboration between professionals (Ige & Cele, 2022). In an Italian context, midwives narrated their attitudes and perceptions towards teen mothers. They reported that caring for adolescent mothers required them to deal with their identities (confused teens, capable teens, and immigrant teens), maternal bonding, and social support demand (Olivari et al., 2011). Nurses working with adolescent mothers in the perinatal period reported that, due to the particular challenges of adolescent mothers, it is important to include the multi-disciplinary approach in the care (Govender et al., 2019).

In the recent Rwanda Demographic Health Survey, 5% of teenagers were pregnant or mothers (National Institute of Statistics of Rwanda et al., 2020). Statistics indicate an increase in teenage pregnancy in these past three years which alarms the increasing need for community support for young mothers in Rwanda (United Nations [UN] Women Africa, 2022). Since adolescent mothers face particular challenges such

as social stigma, rejection by their family and community, and solitude and isolation, this number cannot be overlooked (Coast et al., 2021; Cressey et al., 2020; Isimbi & Umutoni, 2017; Rwandan Men Resource Center [RWAMREC], 2019). It has also been found that 75% of teenage pregnancies are linked to sexual abuse (Collectif des Ligues et Associations de Défense des Droits de l'Homme au Rwanda [CLADHO], 2016). In Rwanda, many cases remain unreported due to unequal power relations between men and women and patriarchal social norms that encourage silence. Within just four years, Rwanda Investigation Bureau (RIB) reported 3.6 times more cases in 2021 than in 2017 (UN Women Africa, 2022), which calls attention to the needs of adolescents when accessing perinatal services in primary healthcare settings. Most adolescent mothers from Rwandan low socio-economic status families access and utilize primary healthcare settings (health posts and health centers) since they cannot afford the costs of public hospitals and private clinics. These health centers are run by nurses and midwives (Binagwaho et al., 2013) and manage 85% of healthcare needs of the population (Rwanda Ministry of Health, 2011). However, it has been demonstrated that only 14% of nurses and midwives working in antenatal care in hospital in Rwanda are adequately prepared to care for a client with a history of sexual violence (Rurangirwa et al., 2018), which shows the importance of exploring the experiences of nurses and midwives when connecting with adolescent mothers. However, there is a paucity of literature on how nurses and midwives connect with adolescent mothers in Rwandan primary healthcare settings. Thus, this study explored and described the experiences of nurses and midwives when working with adolescent mothers in the selected healthcare centers in Rwanda to inform the delivery of trauma- and violence- informed care.

Methods

Research design, setting, and population

This study utilized interpretive description (ID) which is a qualitative approach developed by nursing scholars, after realizing the limitations of the existing traditional methodologies, to generate knowledge around complex clinical issues in nursing (S. Thorne et al., 1997). However, it has become popular among different applied health researchers (Abdul-Razzak et al., 2014; Archibald et al., 2015; Clark et al., 2011; Fyfe et al., 2020; Luciani et al., 2020). ID assists nurse researchers to “build methods that are grounded in our own epistemological foundations, adhere to the systematic reasoning of our discipline, and yield legitimate knowledge for our practice” (Thorne et al., 1997 p.172). In nursing, as in other applied health professions, employing ID assists in understanding nurses' "ways of knowing" (Thorne, 2013 p.295) as well as addressing the "so what" (Thorne, 2008 p.33).

This study was conducted in eight selected primary healthcare settings in Rwamagana district, the Eastern province of Rwanda because of the high teenage pregnancy rate (National Institute of Statistics of Rwanda et al., 2020). As of 2017, primary healthcare centers occupy the majority (60%) of all public health facility beds (NISR, 2019). In ID, it is essential to select the study participants who are willing to share their experiences (Teodoro et al., 2018). Therefore, purposive sampling was used to select nurses and midwives in perinatal services and key informants (managers of the health centers and the community health officers [CHOs]). This study included nurses and midwives who work in perinatal services (PMTCT, ANC, and maternity), provided care at least one year in perinatal services, and who were willing to share their experiences using perinatal services. Managers of health centers oversee health

centers' activities while CHOs oversee CHWs' activities but work hand in hand with perinatal services to identify and receive pregnant women.

Data collection procedures

The University of Western University Research Ethics Board and the University of Rwanda-Institutional Review board approved this study. Following these approvals, the researcher sought permission from Rwamagana District Hospital, which authorized the research team to access the health centers. The researcher presented a permission letter from the Rwamagana district to the managers of the health centers. The researcher was permitted to present the study to the nurses and midwives in staff meetings and the need for the study participants. The managers and CHOs also were invited to participate in the interview. The researcher left his contacts (email and phone number) and the advertisement with the health center, and those who wished to participate contacted the researcher. The researcher explained the research again to the potential participants, and whoever agreed to participate signed an informed consent.

A depth interview was conducted in a private place. The appointment was obtained from their time off to avoid interfering with their work schedule. The interview guide was composed of open-ended, invitational questions to engage the participants in the discussion. The interview was in Kinyarwanda to let the study participants express themselves in their mother tongue. The researcher explained that the interview would be recorded as part of the consent process. I recorded all participants' responses based on in-depth interview schedule guides. Field notes also were taken to record the participants' reactions and non-verbal language. The interviews time range was between 41min to 1h25mins. After the interview, each

study participant received a CAD 10 honorarium (8,000 Rwandan francs) as compensation for their time, meal, transport, and airtime communication.

Data analysis

ID supports concurrent data collection and analysis because one iteratively influences the other. In ID, there is a social construction of reality. Furthermore, researchers engage with data as soon as they enter the field (Thorne, 2016). As opposed to other traditional qualitative methods in which preconceptions must be bracketed, ID recognizes the existence of clinical pattern observations, theoretical knowledge, and existing literature in health research (Thorne et al., 2004). This constitutes the preliminary analytic process and predetermines the design, sampling method, and analytic choices.

Researchers sort and organize data before managing and organizing them using software, such as tracking transcriptions, filing, and coding, and ensuring data are safe and retrievable as easily as possible (Thorne, 2016). In this study, I used Dedoose to sort and organize data. Thematic analysis was employed and included the following steps in keeping with Braun & Clarke (2006) recommendations: familiarizing with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report.

Findings

In this study, 12 perinatal staff (five midwives and seven nurses) who work in perinatal services were recruited. The majority were aged over 30 years and were advanced diploma nurses or midwives; ½ of the participants had been employed in perinatal services > 10 years (Table 5.1).

Table 5.1. Socio-demographic characteristics of perinatal nurses and midwives

No.	Pseudonym	Profession	Age	Gender	Level of education	Working experience
1.	MA	Midwifery	43	Female	A1	17 years
2.	MB	Midwifery	39	Female	A1	9 years
3.	MC	Midwifery	43	Female	A1	7 years
4.	MD	Midwifery	25	Male	A1	2years
5.	ME	Midwifery	33	Female	A1	8 years
6.	NA	Nursing	41	Female	A2	10 years
7.	NB	Nursing	37	Female	A1	13 years
8.	NC	Nursing	38	Male	A1	8 years
9.	ND	Nursing	39	Female	A2	12 years
10.	NE	Nursing	38	Female	A2	10 years
11.	NF	Nursing	41	Female	A1	6 years
12.	NG	Nursing	36	Female	A1	16 years

In this study, seven KIs also were interviewed. Four were the head of health centers and the majority had > 5 years of experience in this role. Three were CHOs who are supervising the MCHWs activities (Table 5.2).

Table 5.2. Socio-demographic characteristics of key informants

No	Title	Age	Gender	Level of education	Working experience
KI1	Head health center	45	Male	A1	15 years
KI2	Community health officer	34	Male	A0	7 years
KI3	Community health officer	36	Male	A0	6 years
KI4	Head of health center	48	Female	A0	17 years
KI5	Head of health center	42	Male	A1	1 year
KI6	Community health officer	30	Female	A0	1 year
KI7	Head of health center	36	Male	A1	1 year

The objective of these interviews was to explore the experiences of nurses and midwives when connecting with adolescent mothers in perinatal services. Nurses and midwives reported that when taking care of adolescent mothers, their roles were expanded beyond their scope, including parenting. For example, as one midwife mentioned, *"We are nurses and midwives, parents, and advisors at the same time. In fact, we are all in one."* (MD) Four main themes with their sub-themes were identified

during the thematic analysis: a) relational practice (being creative and flexible, lending them their ears); b) individual challenges of providing care (lack of knowledge to provide care related to gender-based violence, and gendered experience); c) workarounds (inflexible guidelines, lack of protocol and procedures, lack of nurses' and midwives' in service training, and perinatal environment); and d) vicarious trauma (living the feelings, carrying adolescent mothers' stories home, and hypervigilance in parenting) (Table 5.3).

Table 5.3. Major Themes and Sub-themes

Themes	Sub-themes
Relational practice	Being creative and flexible Lending them our ears
Individual challenges of providing care	Lack of knowledge to provide care related to gender-based violence Gendered experience: Being a male nurse caring for an adolescent mother
Workarounds	Inflexible guidelines Lack of protocols and procedures Lack of nurses' and midwives' in service training Perinatal environment
Vicarious trauma	Living the feelings I carry their stories home Hypervigilance in parenting

Theme 1: Relational Practice

When connecting with adolescent mothers in perinatal services, all nurses described that caring for an adolescent mother as challenging. However, they also added that they try their best to care for the adolescent mothers by being creative and flexible and listening to them with sympathy.

Being Creative and Flexible. Even though much of the care provided in perinatal services is routine, i.e., it is provided to every woman in perinatal services, nurses reported that there are additional demands which can be time-consuming when caring for adolescent mothers. For example, a few nurses reported that caring for an

adolescent mother requires juggling multiple skills and is time consuming. One midwife said, *"It is challenging and time consuming. There can be a time when you can spend three hours without getting her consent for a single procedure such as a vaginal examination because she is mostly in pain."* (ME) Another nurse described this experience as juggling multiple tasks. As they said, *"Ah, it's tough to care for these adolescents; generally, it's difficult. You have to deal with many things at once." (*NA) Another nurse provides an example in the following:

> *There is one [adolescent mother] that I received when examining her, she squeezed her legs together, refused completely, and I failed to examine her. I even approached the person who had brought her to help me, but it did not work. I told myself that instead of having a certain [negative] incident either for the mom or the baby, I'd rather transfer her to the hospital.* (ND)

Health center managers also noted that caring for adolescent mothers can take considerable time; in response they sometimes get involved helping nurses and midwives on duty. As one health center manager said, *"In morning reports, adolescent mothers are reported to give nurses a hard time. I have often been called during the day or at night to assist them with these situations."* (KI5) Nurses and midwives noted differences between caring for adolescent mothers and adult women which they tried to accommodate. Here, the nurse believed that the potential safety risk for mom and baby should be addressed by transferring the adolescent mother to the district level for care. However, this would have added additional costs to the adolescent mother and the family, given the transportation payment and the costs associated with district hospital services.

One nurse, NG, said that sometimes receiving an adolescent mother is challenging due to her complex needs. They added that when they receive the adolescents in ANC visits, they often try to change their mindset because adolescent mothers often have other ideas such as abortion and suicidal ideation. A few of nurses

and midwives ensure that adolescent mothers feel safe and are involved in care as illustrated in the following quote:

> *You can't help her give birth on your own; if she comes with a completed cervix dilatation, you have to be a team to assist her childbirth, encouraging her to make her feel that you are together. I explain everything that giving birth is a process that requires her to put her efforts.* (NG)

Another midwife further explains in the following example:

> *From the first time of receiving her up to discharge or referral, even after discharge, you have to expect that whatever you will do is quite different from other mothers. [For example] you have to deal with delayed consent before the procedures, and provide more explanations.* (MD)

Some key informants (KIs) said they were responsible for reminding nurses and midwives about the importance of ensuring that adolescent mothers are safe and involved in their care. For example, as one KI noted, *"Well, of course, we always encourage our staff to consider adolescent mothers as special and to provide them with additional information to understand what is happening to them during their care."* (KI1)

Advocacy is another concept that emerged from the study participants' narratives. Given the vulnerability of this patient population, e.g., financial instability, being judged and stigmatized and even abused in their communities and because there are no particular care guidelines related to the care of adolescent mother in perinatal services, some nurses and midwives felt they needed to advocate for proper care management and referrals. As one nurse notes in the following, *"I approach the head of the health center to find out how we can register the adolescent mother under the 1st category of community-based health insurance. Then the cost is paid by the district office"* (NC). In a similar vein, another midwife speaks to advocacy in the following: "*There is a project which takes care of those adolescent mothers. We contact them*

and connect her with that project. They help her." (MC) In response to advocacy by nurses and midwives, some KIs helped adolescent mothers in these situations. As one KI said: *"I am always contacted by them [nurses and midwives] to inform me that they [adolescent mothers] cannot pay. We discuss how we can help."* (KI5) Financial instability and the inability to pay for community health insurance is one of the biggest barriers to access perinatal services for adolescent mothers.

In this study, a few nurses reported engaging in interdisciplinary collaboration as a pillar in the proper management of adolescent mothers in perinatal services. They described caring for adolescent mothers as primarily the responsibility of nurses and midwives, however, they also pointed to the roles and importance of a nutritionist, community health officer, social worker, and a mental health nurse as part of perinatal care services. As one midwife said, *"In some cases, we decide that a nutritionist, a social worker and a community health officer work together to take care of vulnerable adolescents since they often come from poor families or are rejected."* (MB) Another midwife added that mental health problems are more prevalent in perinatal services, and sometimes perinatal nurses' and midwives' skills in counselling are limited. For example, a midwife shared the experience of a 17-year-old adolescent mother who had been rejected by the father of her baby, resulting in mental health issues which required interdisciplinary collaboration. Because of the severity of her symptoms, the family brought her to the health center for counselling. This midwife added that it went beyond their capacity as nurses and midwives to provide this kind of care because their skills are limited.

A community health officer, who is the supervisor of community health workers, noted, *"As an adolescent mother, she might not have access to food or clothing, and she may not have a place to live. We try to find a way to help them in*

whatever way we can as a team." (KI2) Another midwife gave similar example in the following, *"There is a nurse in charge of mental health. When you realize that you may not be able to make good counselling sessions, you ask her for assistance. She works every day until Saturday."* (MC) Even though it is in rural areas, having a mental health nurse working until Saturday was one of the strengths of the interdisciplinary team because they would serve adolescent mothers whenever they needed care. Understandably, working in an interdisciplinary team helped these nurses provide quality care to these adolescent mothers. In addition, it prevented adolescent mothers and their families from paying additional costs related to transfer to district hospitals for further management of mental health problems.

'Lending them our Ears'. The nurses and midwives interviewed discussed ensuring that adolescent mothers receive non-judgmental care. A few of them noted that active listening is a top priority. For example, as one nurse said, *"The first thing I focus on [with] adolescent mothers is welcoming them without judgement and get this opportunity to teach them and ready to hear their voices regardless of their backgrounds. You don't have to blame them [adolescent mothers]."* (ND) Another nurse similarly reported, *"I do not judge or blame them [adolescent mothers]. They had been and are still being blamed so much in the community and families. As a nurse, I must show her love and the difference and listen to them with sympathy*." (NE) A midwife added, *"Hmm… one thing I found that is important is listening to them…. well, lending them our ears."* (MB) Through the non-judgmental approach, the quotes above exemplify how these nurses recognize the impact of family and community stigma on an adolescent mother's life. These nurses and midwives wanted to ensure the adolescent mothers felt full acceptance instead of judgement – listening was an essential element of that process.

Even though it is challenging to care for adolescent mothers in perinatal services, some nurses and midwives reported that they overcome these challenges by fostering connection and trust with the mother. A midwife shared how creating a positive relationship helped care for an adolescent mother with several problems. She assisted a 15-year-old girl in the ANC who was impregnated by a local leader after promising her some school materials. According to the adolescent this man beat and insulted her; she was traumatized and in response requested an abortion. However, the midwife spent time with the adolescent, explained the issue and the consequences that could follow. She also explained to the adolescent mother that her baby would be her success despite what has happened to her. The adolescent mother agreed to give birth, and now she is happy with her baby and always comes to see that midwife. At delivery, the adolescent mother was referred to the district hospital for management. However, the relationship between the midwife and the adolescent mother continued to grow, as noted in the following quote:

> *I found that the conversation we had made her come back looking for me, and now she keeps coming to see and tell me 'see your baby.' Now, her baby is my baby too... These words keep motivating me in my daily practice to form a connection and build a positive relationship with adolescent mothers. (*MB)

In the situation above, the midwife demonstrated that listening to this young mother and developing a positive relationship resulted in long term positive outcomes such as adolescent mother's informed decision to go forward with the pregnancy and the care of her baby. The midwife considered keeping the pregnancy the only positive outcome, while abortion was considered a possible option by the adolescent mother.

Theme 2: Individual Challenges of Providing Care

From the participants' narratives, it was revealed that the majority of nurses and midwives perceived some challenges when connecting with adolescent mothers. These challenges included a lack of knowledge and skills, and gendered experience.

Lack of Knowledge to Provide Care Related to Gender-Based Violence (GBV). Some nurses and midwives reported challenges which hindered the quality care of provision with adolescent mothers, including gaps in knowledge and skills specific to GBV against adolescent mothers' care. For example, a midwife in this study reported the following:

> *I have no special knowledge of caring for an adolescent with a history of violence. I have to help her in every way possible, and I refer her to Isange One Stop Center, which would help her with anything. The only other knowledge I have to help these adolescent mothers is that if she does not accept giving birth, they can have an abortion. If she is a GBV case, she has the right to abort. Yeah, that's it. I believe that my knowledge is not sufficient. I need sufficient knowledge because what I do is what I can help anyone else who is not an adolescent mother. For sure, I need to upgrade my knowledge and skills to take care of GBV cases.* (MB)

In this case, the midwife did not feel she had the ability to provide care adequately related to gender-based violence (GBV). The Isange One Stop Center supports the national efforts of the Ministries of Health, National Police and Justice to combat gender-based violence. As the name Isange Centre implies, "feel free/feel welcome," the center communicates a message of security and openness to survivors. A lack of specific knowledge was also reported by another participant, *"I talk to them [adolescent mothers] as a parent but no other specific knowledge I have."* (ND) A midwife notes her need in the following, *"Personally, knowledge isn't a problem. What is needed in terms of knowledge is to "refresh" to do a refresher training on how to take care of this special population."* (MD)

KIs also reported nurses' and midwives' limited knowledge to care for adolescent mothers. Nurses and midwives are cognizant that adolescent mothers need special care because of their unique needs. Inconsistencies in care may be related to the years of experience, time since finishing school, and/or academic background (i.e., midwifery vs. nursing). For example, the nurse participants I interviewed who recently graduated reported utilizing knowledge from school, while those more experienced providers found recalling information more challenging.

Gendered Experience. Another personal challenge encountered by the study participants is a gendered experience. All male nurses and midwives reported that caring for adolescent mothers is sometimes difficult. Several cases were described where adolescent mothers refused a male nurse or told male nurses/midwives not to touch them because they were male. As one male nurse said,

> *Because I am a male health care provider, sometimes, they fear me. I have met with some [adolescent mothers] who refused me to examine them because I am a male provider. One told my female colleague that men are not serious. It's understandable, but she might trust you when you first show her that you are a healthcare provider different from the person who abused her. If she does not want, you don't have to force, better to call females colleagues to help.* (NC)

In this similar context, the male midwife MD shared the story of a 15-year-old girl who came to give birth. She was going through much labor pain. He had to conduct a vaginal exam to ascertain the extent of dilation. Through counselling, he told her that he would examine her and she refused. He explained the whole process again, and she couldn't listen. He said he didn't force her but thought she might have a problem. Through further assessment, he realized it was because he was a male about to examine her. The male midwife called a female nurse/midwife who explained everything to the adolescent mother. In the end, he asked the female nurse/midwife

how it went, and she said that she had examined her freely and that she accepted and it had gone well. All these nurses and midwives recognized that forcing the adolescent mothers could result in negative outcomes. They have been able to involve female providers to ensure the safety of their clients.

Theme 3: Workarounds

Most nurses and midwives reported the use of workarounds in perinatal care when caring for adolescent mothers as related to stringent guidelines, a lack of protocols and procedures and lack of nurses' and midwives' education and training and the nature of the perinatal environment.

Inflexible Guidelines. A few nurses and midwives reported that when caring for adolescent mothers in perinatal services, they follow guidelines that are not flexible; they do not accommodate the needs of the adolescent mother. For example, requesting adolescent mothers to bring their husbands or partners on the first visit, which they know would re-traumatize them because they are sure they do not have them or can't find them due to the fact that according to article 194 of the Rwandan penal code, anyone living with a child as a husband or wife will be punished with life imprisonment. Therefore, it's almost impossible to find these men/boys. Most of the nurses and midwives have said that they do not see why they ask that and believe that this is something which can be changed for the sake of helping adolescent mothers. As one midwife said, *"Everyone you tell to bring a partner becomes unhappy and sometimes may cry."* (MB) When asked why they ask adolescent mothers to bring their partners while they are sure that they cannot find them, she replied, *"That is how guidelines are structured. You have to follow them and tick in the register that you have done that."* (MB) A nurse shares their response to the guideline as follows, "*If*

she doesn't find a partner or I realize that if she goes back, she will not come back, I help her regardless of the rules. However, it's not accepted. She should bring an authorization copy from the local authorities." (NF)

Workarounds put nurses and midwives at risk to help adolescent mothers. A midwife in perinatal services said that they [nurses and midwives] do not inquire about adolescent mothers' partners because they are sure that it's almost impossible to find them, *"For their husbands, you cannot find any because they might be jailed because it is criminalized"* (MB). The head of the health center KI5 also noted, *"So, here, we can't ask them [adolescent mothers] to bring their husbands."*

Regardless of the inconsistencies between the study participants' responses to the guidelines, the reviewed national ANC (2020) guideline states, "*Pregnant women attending ANC services should receive HIV testing services together with their male partners, preferably within the first trimester of pregnancy"* (p. 22). However, it is still being determined what to do if one comes without a male partner, which may cause ambiguity related to poorly structured policies and procedures. After review, it was observed that the document mentions the role of *"a male partner," "partner,"* or *"husband"* in perinatal services. However, no explicit attention is given to women without partners, including adolescent mothers. These inconsistencies may be related to the type of services an adolescent mother will receive, either emergency or non-emergency. As a supervisor noted, *"Sometimes they [adolescent mothers] don't get services directly, especially if they do not have insurance, but the health center's head helps us to resolve these issues"* (KI6) and when asked why an adolescent mother does not get the services right away, they said, *"It delays because we need to inform the*

health center head that adolescent mothers do not have health insurance. So, it may take some time to sort it out.*"* (KI6)

Workarounds take various forms. Nurses knew the inflexible guidelines in these cases and bypassed them to help adolescent mothers. In addition to shunning perinatal services, nurses and midwives recognized the negative effects of sending adolescent mothers back to MCHWs or executives of the cell. Thus, they chose to help them get services instead of sending them back to the community.

Lack of Protocols and Procedures. In this study, nurses and midwives noted the tensions and disjuncture created between the guidelines re: perinatal care and what adolescent mothers needed. For example, as one nurse said,

> *We do not have special guidelines or protocols for adolescent mothers. In the guidelines, some information about adolescent mothers is insufficient. You will find that it's only one paragraph, but when you take care of an adolescent mother, it's a whole person who even needs more care than other mothers. It's challenging and sometimes you are sure that, even though you helped her [adolescent mother], you did not do it appropriately.* (NA)

In a similar vein, another nurse notes, *"We have some books here; however, I cannot say that they are specific to adolescent mothers. We use them to all mothers. When it comes to adolescent mother, you use your judgement."* (ND) The nurses' and midwives' perspectives regarding the lack of protocols and procedural guidelines were echoed by most of the health center managers. For example, one head of the health center noted,

> *No charts are available. We do not have the written instructions to show us how to care for an adolescent mother from point a, b, c…. How to receive and talk to them …Yet they should be hung somewhere in the offices to be used as references during consultations, as protocols and guidelines so that it is well-known what to do* (KI7).

Another health center manager reported, *"We receive them using the same protocols as other mothers. However, there is some information about adolescent mothers in*

ANC." (KI1) In the reviewed ANC guideline, only half of the information page is specific to adolescent mothers. These quotes exemplify how nurses and midwives struggle to meet adolescent mothers' needs because of the lack of protocols and guidelines; as a result, they are aware that the care they provide to these adolescent mothers is inadequate.

Lack of Service Training for Nurses and Midwives. Some nurses and midwives have highlighted a lack of special training as challenges they face in their daily practices in perinatal services when connecting with adolescent mothers. As one midwife reported, *"We do not receive any on job training [caring for adolescent mothers] except for what we learn in a school deemed to be not sufficient." (*MA) In this similar context, another nurse added:

> *We all [healthcare providers] need the training to care for adolescent mothers. There is a time when you receive them and realize you are not trained; it's an arrangement. We need that training to not wait for those in charge of mental health or with additional training to help adolescent mothers.* (ND)

The midwife in the first quote emphasizes the need to update their knowledge since they still rely on school-level knowledge. In the second quote, a nurse illustrates how waiting for a mental health nurse or other trained healthcare provider can impact service provision. A number of health center managers have acknowledged the need for nurses and midwives to receive specific education and training related to the care of adolescent mothers in perinatal services in order for them to feel prepared and confident in this area of practice. For example, one health center manager noted, *"We can't say we had a special experience because we didn't get in-depth training to care adolescent mothers. We got trained a few times, and it is not enough."* (KI7) In a similar context, another head of the health center highlighted the following:

> *Lack of enough knowledge because they rely on training; some got [it], and others didn't. So, it is understandable that those who didn't get trained will get*

> *challenged while trying to help those adolescent mothers. I often receive complaints and hear some cases referred because nurses and midwives reported that they could not manage, and when you get to know them, they are simple. So, they [nurses and midwives] must get trained roughly about the special treatment designed for those adolescent mothers.* (KI1)

There is a risk that some nurses and midwives might not be able to respond to the potential effects of trauma and ongoing violence and handle disclosure appropriately due to their lack of knowledge and skills in this domain. It is noteworthy that from the participants' narratives, the approaches to adolescent mothers vary. In addition, their lack of skills is a potential cause of re-traumatization. For example, as one nurse reported, *"If you force her [adolescent mother] to talk, you can hurt her in one way or another."* (NG) In a slightly different vein, another nurse noted, *"I have witnessed some cases where nurses and midwives sometimes fail to interact with adolescent mothers because they could not know some trauma signs and symptoms."* (KI4) In this study, the lack of knowledge about trauma and violence might impact interactions between nurses, midwives, and adolescent mothers. This could contribute to re-traumatization. Although brief, the reviewed ANC (2020) guideline has some special considerations to care for adolescent mothers, however, the guideline also states, *"Special training is required to work with adolescent mothers, and the special considerations in the guide do not replace the special training."* (p. 30)

Perinatal Environment. In this study a few nurses and midwives also highlighted the challenges they face maintaining confidentiality as associated with the services and structure of the clinics. For example, when adolescent mothers leave the health center for the first time, like other mothers, they are given some medical materials such as Insecticide-treated bed nets (ITNs) and other medical supplies. In the community, ITNs from the hospital signals that you are pregnant. As one midwife notes, "*They are reluctant to take them [ITNs] home, saying whoever sees them will*

think they are pregnant." (MD) Nurses and midwives said they struggle to convince the adolescent mothers that the important thing is the health of their babies and themselves and sometimes they find a way to help assist with this. For example, this midwife will sometimes buy an envelope so to conceal the ITNs. However, teaching about the advantages of ITNs for the health of the adolescent mothers and their babies is a challenge given this reality. A midwife provides another example related to the perinatal environment as reflected in the following quote:

> *I have seen many adolescent mothers coming and not sitting with others. They see me and say hey, I want to tell you something. They all had the same issue of wanting to avoid sitting in the waiting area with others. Immediately I led them to another entrance; you saw that we have two doors, an entrance and an exit. They usually tell me they are worried, ashamed and afraid of what they have experienced.* (MC)

In this similar context, a nurse emphasizes, *"Sometimes I see her [adolescent mother] the other side and ask why she is not taking [a]seat, and she tells me that there are many women who are her neighbors."* (NG) The nurses and midwives expressed that they want to ensure the adolescent mother's confidentiality. However, the environment itself does not allow them to do so. Adolescent mothers share common waiting areas with other mothers, some of whom might be their neighbors, and thus, they fear coming straight into perinatal services. In this case, the nurse works to meet the adolescent at another door so that she won't meet with other clients on the queue.

Healthcare providers suggested different ways adolescent confidentiality and comfort could be achieved. As one nurse said:

> *It should be done like in anti-retroviral therapy (ART) services, for example. Those who come for medication in the ART service are sitting on their own; they don't make them sit with others who come for a routine check-up.* (NE)

A midwife suggested, *"They [adolescent mothers] should be received in a place where there is an entrance different from the exit because it helps them."* (MD) KIs

also stressed the importance of infrastructure for perinatal services. For example, a health center manager stated,

> *These adolescent mothers are ashamed of sharing the waiting areas with others since they do not want them to know what they are doing there. It would be better to have their areas for ANC or even separate exit doors so that no one sees them returning from these services.* (KI1)

However, as supportive as another health center manager was to this idea, he raised a major challenge in the following, *"Isolated rooms require special resources to ensure privacy and comfort. A private room can be closed, so the discussions are between you, but we still need the ability, and there's no way."* (KI7) In the above quotes, most healthcare providers acknowledged that the perinatal environment was a potential barrier to access for adolescent mothers.

Theme 4: Vicarious Trauma

The majority of nurses I interviewed in this study, become involved emotionally with adolescent mothers and are often consumed with thoughts about the adolescent that seep into their personal lives. They reported that sometimes they live the feelings of adolescent mothers, become depressed or project the same stories onto their own children, and authoritarian parenting.

Living the Feelings. A few nurses reported that during the conversations with adolescent mothers, they sometimes feel emotionally exhausted by the contextual feature of their lives. A midwife shared the story of a 17-year-old who went on a trip with her female friends who had also invited boys. The adolescent mother was raped repeatedly after being locked in a room. Thus she did not know the father of her baby. Her family rejected her, and she wandered on the streets. This midwife said, *"I heard that case, and I felt so sad; it touched my heart, and I felt shocked."* (MD) Another nurse notes, "*All their [adolescent mothers] problems accumulate in my head, and I*

could not find ways to console them. It's challenging and traumatizing." (NC)

Similarly, another nurse says,

> *I hate listening to their sad stories when I do not have anything to help them apart from medical care. I understand that is part of caring, but I listen to them for nothing. I can't take them [adolescent mother] to my house; I can't give them money… anyway it's tough to understand.* (ND)

According to one nurse, most of the adolescents she sees share stories about how they live in difficult conditions in the communities, how their parents abandoned them, and how they are not able to study anymore because of poor living conditions. She notes,

> *There is nothing you can do about that; I do not have the means to do so either. I can feel goosebumps running along my arms and legs whenever they tell me all of these stories. This affects me emotionally, and I immediately think of my children. So, it's not easy.* (NE)

The nurses in this study shared their emotional responses to caring for adolescent mothers. Vicarious trauma is a real threat to the well-being of healthcare providers in this context, yet nurses and midwives receive little education and training related to same.

'I carry their Stories Home'. Some nurses and midwives said that adolescent mothers' stories negatively affect them to the extent that they become depressed or project the same stories onto their children. They said that when they are home or outside work, they continue to think about the adolescent mothers' stories. For example, one nurse notes, "*I carry their stories home. I go home to my family thinking about it often and sometimes I would project it on my children or others."* (ND)

In a similar vein, another midwife relates her feelings,

> *Absolutely! It's challenging for me because I also have adolescents, which affects me. When I leave seeing a case like that, I immediately imagine it on mine… So I directly see that it has affected me because I go and take more time to teach mine or even take time to think if it had happened to mine. Sometimes I spend a long time thinking about that. You might be upset or even cry alone.* (MB).

Carrying these stories outside the perinatal environment, crying alone and projecting them onto their children, it is a sign that caring for adolescent mothers is sometimes traumatizing.

Hypervigilance in Parenting. Four nurses and midwives reported that they sometimes do not trust males who approach their daughters or close female family members. Others do not even wish to understand that their daughters are dating. One midwife said that because of caring for adolescent mothers and hearing the stories, for example of being raped by their family's friends or even by family members, they don't want their daughters to have relationships with any males. This midwife mentioned, "*As a parent, I am now not happy to see any male who starts these relationships with my daughter. Their [adolescent mothers] family's friends, neighbours and even some family members are the ones who impregnated them."* (MB) Another nurse said that when they teach their children or others, they refer to those stories, especially emphasizing that men as perpetrators should be accountable for their actions. As one nurse said sadly (with an angry face), *"I do not tolerate these problems… I, personally when teaching my daughters, should emphasize on avoiding men; they are the ones who cause the problems." (*NG) As these narratives illustrate the consequences of vicarious trauma can be far reaching – even into the personal lives of the healthcare providers.

Even though they are affected, when we asked their head of health centers and supervisors about the available programs to protect their staff from vicarious trauma, they said they do nothing. For example, one study participant said, *"There's nothing special based on our administration structure."* (KI4). Another key informant said: *"I don't think we have this service for nurses. They have their own ways of taking care of*

themselves." (KI1) These quotes reflect that there is a lack of support for perinatal healthcare providers who are at risk of developing vicarious trauma.

Discussion

The aim of this study was to explore the experiences of perinatal nurses and midwives as they work with adolescent mothers in primary healthcare settings in Rwanda. In this study, the main themes were relational practice, individual challenges of caring, use of workarounds, and vicarious trauma.

As is evident from the participants' narratives, midwives and nurses interact with young moms through relational practice in order to support their well-being. In nursing, relational practice/inquiry implies that nurses have a deep understanding of the healthcare needs of their patients within the context of the complex circumstances under which patients are experiencing healthcare and nurses are providing care (Doane & Varcoe, 2020; Doane, 2002; Younas, 2020). A relational practice/inquiry approach helps nurses build a trustworthy therapeutic relationship that provides a comprehensive understanding of the client's particularities (Doane & Varcoe, 2007). In perinatal services, this approach is very helpful for recognizing and understanding adolescent mothers in the real sense and is critical for determining how to tackle their unique challenges. In a study conducted in Canada, perinatal nurses engaged in relational practice with mothers by being mother-friendly (treating all mothers the same) regardless of their age and other circumstances (Quosdorf et al., 2020).

It has been reported that nurses and midwives find it challenging and time-consuming to care for adolescent mothers since most of them are worried, ashamed, shy, and distressed when it comes to being pregnant. In a study conducted in Zambia, midwives reported that caring for adolescent mothers was challenging since it was

difficult for them to follow instructions provided by midwives (Honkavuo, 2020). As a result, some midwives and nurses rudely scolded adolescent mothers (Bwalya et al., 2018; Shatilwe et al., 2022). The current study found that nurses and midwives must be creative and flexible to connect with adolescent mothers. In addition, they said they juggle multiple skills. According to other studies, perinatal nurses strive to provide a positive experiences to assist adolescent mothers because of the unique problems adolescent mothers present (Chamorro et al., 2019; Quosdorf et al., 2020). However, in other studies, nurses and midwives reported they had negative attitudes toward adolescent mothers (Erasmus et al., 2020). In their report, Wilson and colleagues noted that healthcare professionals may have assumptions about adolescent mothers' behaviours, which can affect how they provide care (Wilson et al., 2009). However, some adolescent mothers' behaviors are thought to be associated with the lack of mental preparedness (Al-kloub et al., 2019; Bwalya et al., 2018; Chikalipo et al., 2018).

Financial hardships make it difficult for adolescent mothers to afford healthcare services (Apolot et al., 2020; Bhana & Nkani, 2016; Mashala et al., 2012; Rukundo et al., 2019; Shatilwe et al., 2022). As part of the current study, nurses and midwives reported that they advocate for adolescent mothers in order to help them pay for some of their healthcare services and find the basic needs they need. Results similar to these have also been reported elsewhere (Gbogbo et al., 2020). Midwives in Jamaica reported advocacy as an important component of caring for adolescent mothers (Wilson-Mitchell et al., 2018). In the present study, nurses and midwives demonstrated relational practice by adopting multidisciplinary approaches. As an example, they reported involving mental health nurses, social workers, and nutritionists in the care of adolescent mothers. A multidisciplinary team was proven to

be an essential approach when caring for adolescent mothers due to their unique needs (Govender et al., 2019; Wilson et al., 2009). Most nurses and midwives in this study emphasized the importance of listening to their adolescent clients with sympathy. The findings corroborate with the study which has been conducted in Zambia whereby nurses and midwives reported trying to understand and support adolescent mothers because they have different reasons for becoming pregnant, such as cultural influences (Honkavuo, 2020).

Nurses and midwives reported dealing with individual challenges when caring for adolescent mothers in this study. First, they mentioned a lack of knowledge and skills specific to adolescent mothers' care. Gaps in performing some procedures when caring for adolescent mothers were also reported in previous research studies (Annor et al., 2021; Jonas et al., 2016). This presents a challenge to the quality of care provided to adolescent mothers. Being a male healthcare provider caring for an adolescent mother was another challenge. It has been reported by all male nurses and midwives that adolescents do not allow them to touch them, particularly when they need to conduct vaginal examinations. These findings corroborate the findings of other studies (Bwalya et al., 2015; Henning et al., 2020; Millar et al., 2021). However, in contrast, in a study conducted in South Africa, perinatal women preferred being cared for by males because they were respectful and understanding (Mthombeni et al., 2018). For some people, because of cultural norms and religious beliefs, it is not acceptable for a male to care for a woman (Zepro et al., 2021). The gender of the health care provider and the preferences of adolescent mothers should be considered when assigning healthcare providers within perinatal services.

Workarounds related to inflexible guidelines, lack of protocols and guidelines tailored to adolescent mothers' needs, limited nurses' and midwives' training, and the structure of the perinatal environment were also identified as themes in this study. Scholars have coined the term 'workaround' as a means by which a professional body or group achieves a specific goal when they are confronted with an obstacle to achieving that goal (Halbesleben et al., 2008; Koppel et al., 2008). Nurses use workarounds when they lack time or tools to complete their tasks according to guidelines/manuals etc. (Bianchi & Ghirotto, 2022). Midwives and nurses in this study reported that sometimes rules and regulations prevent them from helping adolescent mothers, such as requiring the father of the baby and proof of community health-based insurance at the first appointment. Despite these rules, they said they would help adolescent mothers. Being challenged by policies and guidelines among midwives working with adolescent mothers was also reported in Jamaica (Wilson-Mitchell et al., 2018). In the current study, it was mentioned that there are no protocols and guidelines for caring for adolescent mothers and it is difficult to provide tailored care. A study conducted in Namibia also reported the lack of specific guidelines and protocols (Shatilwe et al., 2022).

Perinatal nurses and midwives have reported limited training in caring for adolescent mothers. As a result, they are reliant on what they learned in school and this was deemed as insufficient. Limited training for perinatal staff has been reported in Rwanda and other countries (Byers-heinlein et al., 2020; Jonas et al., 2018; Rurangirwa et al., 2018). Consequently, it is challenging for midwives to address some of the sexual health aspects relevant to midwifery practice during perinatal care, which negatively impacts the quality of care. In the current study, nurses and midwives reported that Rwanda's perinatal environment was not welcoming to

adolescent mothers. Midwives and nurses have reported receiving adolescent mothers who do not wish to sit with other mothers due to a sense of belonging. Adult mothers stigmatize them when they learn they are pregnant. Nurses and midwives said they tried to find an unconventional way to receive adolescent mothers. They suggested using another service or door to meet their adolescent mothers' needs.

In the participants' narratives, vicarious (VT) was identified as a key finding. According to (Kennedy & Booth, 2022) "VT is a psychological phenomenon that causes a permanent cognitive shift in the inner experience and world views of nurses after prolonged empathetic engagement with a patient's trauma" (p.1). In the current study, nurses and midwives shared their experiences of how adolescent mothers' stories and struggles affected them. As an example, they said they often felt sad listening to them. They report that they live with their feelings, carry their stories out of the workplace and find themselves hypervigilant and perhaps overprotective with regards to parenting their daughters. A recent rapid evidence assessment found that working with clients who experienced sexual violence has several negative impacts, including developing trauma symptoms, social relationship disruptions, changes in individual behaviors, and psychological and emotional distress (Crivatu et al., 2023).

The findings from this study indicate a need to integrate TVIC into perinatal services. This is to make the environment safe and welcoming for adolescent mothers, perinatal nurses, and midwives. TVIC is built on the following principles. The provider needs to: 1) understand trauma, violence and its impacts on someone's life and behavior; 2) create emotionally and physically safe environments for all clients and service providers; 3) foster opportunities for choice, collaboration, and connection; and 4) use a strengths-based approach and capacity building to support

clients (Ponic et al., 2018). For making policies and practices safe, TVIC emphasizes that there needs to be an understanding of trauma and ongoing violence among individuals and communities (Ponic et al., 2018) and the intersection of interpersonal and structural forms of violence and their impact on health and well-being (Browne et al., 2015).

Conclusion

Nurses and midwives described caring for adolescent mothers as challenging due to their unique needs. These needs require them to be creative and adaptable, as well as to listen to adolescent mothers. When connecting with adolescent mothers, perinatal nurses and midwives face challenges such as a lack of knowledge specific to adolescent mothers' care, inflexible guidelines, lack of protocols and procedures, lack of nurses' and midwives' training, and the lack of safety in the perinatal environment. Last, most nurses and midwives reported vicarious trauma as a practice challenge. Therefore, perinatal guidelines and protocols are needed for caring for adolescent mothers. Training should be provided to increase nurses' and midwives' knowledge of caring for adolescent mothers and mitigating vicarious trauma. Organizations should develop strategies to support nurses and midwives at risk of vicarious trauma.

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Chapter Six: "…Our duties are almost similar to that of soldiers; we do whatever we can and help them…": Maternal Community Health Workers' Experiences Working with Adolescent Mothers in Rwandan Communities

Abstract

Introduction: Community Health Workers (CHWs) programs play a critical role in achieving Universal Health Coverage (UHC) and the Sustainable Development Goals (SDGs) related to health. Even though health inequities continue to emerge in lower- and middle-income countries (LMICs) communities and due to vulnerabilities and challenges, CHWs programmes have effectively reached disadvantaged groups by extending access to healthcare services including to adolescent mothers.

Purpose: To explore the experiences of maternal community health workers (MCHWs) when working with adolescent mothers in Rwanda to ensure the delivery of Trauma and violence-informed community maternal services.

Methods: This study used an interpretive description (ID) design. Twelve MCHWs in charge of maternal, newborn and child health, in the Eastern province of Rwanda, Rwamagana District were purposively recruited to participate in an in depth-interview. To gain in-depth insights about MCHWs experiences, seven key informants (four managers of the health centers and three community health officers [CHOs]) were also interviewed. Data were sorted and organized using Dedoose and were thematically analyzed. Ethical approval was sought from the University of Western Ontario Ethics Research Review Board and the University of Rwanda College of Medicine and Health Sciences Institutional Review Board.

Findings: Four main themes were identified: promoting safe adolescent pregnancy and motherhood, facilitators connecting with adolescent mothers, contextual

challenges, and vicarious trauma. MCHWs promote safe adolescent pregnancy and motherhood through providing continuity of care, acting as a liaison, relational engagement and tailored home visits. MCHWs expressed love for their jobs, peer support, and structural support as facilitators. Some challenges were identified, such as handling disclosure, dealing with adolescent mothers' financial constraints, difficulties accessing adolescent mothers, and transportation issues. MCHWs are at high risk of vicarious trauma.

Conclusion: MCHWs play an essential role in helping adolescent mothers in communities. However, they face several challenges which impact their roles of caring for adolescent mothers. There is an urgent need for leaders and policymakers to create ways to support MCHWs and provide equity-oriented training, supervision, and ongoing mentoring. Supporting parents of adolescent mothers is highly recommended to make perinatal services more accessible to adolescent mothers.

Keywords: Community Health Workers, adolescent mothers, community, Universal Health Coverage, Rwanda.

Introduction

Maternal mortality and morbidity continue to be a major concern in developing counties. According to the World Health Organization [WHO] (2021), low- and middle-income countries (LMICs) account for 94% of all maternal deaths. Globally, there were 42.5 adolescent births per 1000 women in 2021, down from 64.5 in 2000. Even though there is a remarkable decline in other parts of the world, there were slower declines in sub-Saharan Africa (SSA) regions, with 53.2 births per 1000 women in 2021 (United Nations Department of Economic and Social Affairs Population Division, 2019). “A woman’s lifetime risk of maternal death is the probability that a 15-year-old woman will eventually die from a maternal cause” which translates 1 in 5400 in high-income countries compared to 1 in 45 in low-income countries (WHO, 2021 para. 3). Girls aged 15-19 years have a two-fold higher risk of dying in childbirth than women aged 20 years and above (United Nations Population Fund [UNFPA], 2023).

In LMICs, barriers for adolescent mothers to access and utilize maternal services have been studied. These barriers include transportation, cultural and beliefs, lack of family support, economic factors, and quality of care (Dahab & Sakellariou, 2020). Another systematic scoping review found that many adolescents in sub-Saharan African countries don't access and utilize maternity services during pregnancy. This is due to several individual, interpersonal, organizational, and systemic factors contributing to low access and utilization. Individual factors include the level of education, age, residence, socio-economic class and knowledge and perceived need for maternal healthcare. Interpersonal or family factors include family traditions, partner's knowledge, education and perceptions, peer support and other family members' support. Organizational factors include availability of services,

healthcare providers' attitudes, and accessibility of services. Systemic factors include poverty, cultural and religious beliefs, traditional practices, and social stigma (Mekonnen et al., 2019). Other studies demonstrated that it is difficult for adolescent mothers to access health services, including a lack the financial support to do so. In addition, lack of privacy and being discriminated against and disrespected by health workers were among other barriers (Cumber & Atuhaire, 2022; Dahab & Sakellariou, 2020). Adolescent mothers fear others' reactions because the family, community and facilities take adolescent pregnancy as deviant, shameful, and irresponsible and this impact them how they access and utilize maternal services (Erasmus et al., 2020). Consequently, adolescent mothers can hide in the community and not use the available services which shows the importance of utilizing MCHWs to act as liaison between adolescent mothers and health services.

Community health workers (CHWs) programs play a critical role in achieving Universal Health Coverage (UHC) and other global goals, including the Sustainable Development Goals (SDGs) related to health (Masis et al., 2021). CHWs programs have been implemented to alleviate the shortage of healthcare workers in formal healthcare systems and promote access to and utilization of healthcare services at a community level (WHO, 2017a). A CHW is an individual who has no formal medical training and has been elected by other citizens in the village where they reside to provide basic health services (Perry et al., 2014). CHWs are well positioned geographically, culturally and socially to improve maternal and child health in low and middle income communities (Igumbor et al., 2020; Nadella et al., 2021; Olaniran et al., 2019; Perry et al., 2014).

Currently, Rwanda has 45,516 CHWs and the services they offer include prevention, screening and treatment of malnutrition, integrated of childhood illnesses,

family planning, maternal newborn health, treatment of HIV, TB and other infectious diseases, and behavior change communication (Rwanda Ministry of Health, 2018). Three CHWs are assigned to each Rwandan village, with one female who delivers maternal and child health interventions (maternal community health workers [MCHWs])- commonly known as agents de Sante Maternelle (ASMs) and two male-female pairs called Binômes. MCHWs provide maternal and newborn care at home and in follow-up visits and one MCHW is responsible for one village, or approximately 100-150 households (Egan et al., 2017). Despite several challenges MCHWs face in Rwanda, such as supply shortages, transportation, lack of formal places to use when receiving and treating patients and other financial constraints, they love their job and continue to take care of people regardless of the financial gain (Schurer et al., 2020). When other healthcare professionals support MCHWs well, they play a crucial role in strengthening primary healthcare systems and improving the health of the underserved population (Masis et al., 2021). Even though health inequities continue to emerge in LMICs communities, CHWs programmes have effectively reached disadvantaged groups by extending access to healthcare services (Ahmed et al., 2022), including adolescent mothers.

Several scholars in Rwanda have studied the role of MCHWs in maternal child health. One study has revealed that MCHWs promote access to health services, reach out to women to provide services and receive women when they come to seek their services (e.g,, Ndirima et al., 2018; Tuyisenge et al., 2020). Other studies have shown that MCHWs saved lives of women with severe conditions in communities by transferring them, calling an ambulance or accompanying them to the healthcare facilities (Bagambe et al., 2022; Ndirima et al., 2018). However, mothers in community reported that sometimes they were not satisfied with services provided by

MCHWs , for example, not enough information was provided, insufficient emotional support, and a gap in helping them to solve practical problems (Mwendwa, 2018). Due to adolescent mothers' vulnerabilities and challenges noted above, there is a need to explore how MCHWs work with them to ensure that they meet their needs. However, the literature on how MCHWs connect with adolescent mothers in Rwanda is scarce. Therefore, this study aims at exploring and describing the experiences of MCHWs when working with adolescent mothers in Rwanda to ensure the delivery of Trauma and violence-informed community maternal services.

Methods

Research design

This study used an interpretive description (ID) design (Thorne et al., 1997) to unpack the experiences of MCWHs when working with adolescent mothers. Nursing scholars developed this design to generate knowledge relevant to the applied clinical context. Even though ID was developed to generate answers to nursing practice problems, it was widely used by other applied sciences and asserted that it is useful to provide "logical structure and philosophic rationale"(Thorne, Kirkham, & O'Flynn-Magee, 2004 p.2), which would be relevant to utilize it when exploring how MCHWs connect with adolescent mothers in Rwandan communities as part of perinatal services.

Study setting and population

This study was conducted in the Eastern province of Rwanda, Rwamagana District. This area was selected among others because of the highest teenage pregnancy rate compared to other provinces NISR et al. (2020). Rwanda is among the few developing countries which have achieved UHC due to equity oriented care,

inclusiveness, quality services in primary healthcare (WHO, 2017b), including MCHWs' services. Because MCHWs are in charge of maternal, newborn and child health, this study recruited them to explore their experiences when working with adolescent mothers. MCHWs roles include identifying pregnant women, following up pregnant women and their newborns, encouraging utilization of Antenatal Care (MoH, 2013). In ID, the recruitment of the study participants capitalizes those who have a will to share their experiences (Teodoro et al., 2018). Thus, purposive sampling was used to select the MCHWs who fulfilled the inclusion criteria such as being in charge of maternal and child health, have worked with adolescent mothers for at least one year in the community, and willing to share their experiences. To gain in-depth insights about MCHWs experiences, seven key informants (KIs) (four managers of the health centers and three community health officers [CHOs] were also interviewed. They were included in this study because they oversee the roles of MCHWs.

Data collection procedure

The ethical approvals were obtained from Western University Health Science Ethics Board (HSREB, project ID: 119846) and the University of Rwanda, College of Medicine and Health Sciences Institutional Review Board (Approval Notice: No 330/CMHS IRB/2021). The ethical approvals were presented to the Rwamagana District to seek permission to access the health centers. The permission letter was presented to the managers of the health centers to request access to the study participants. MCHWs are supervised by the health center office and the CHO. The latter helped us to know when the MCHWs' meetings were scheduled so that I could meet them. I presented my study in their meeting and gave them the letter of information for better understanding and asking more questions. I gave time to the study participants with my contacts so that whoever wanted to participate could

contact me to schedule an appointment. Those who agreed signed an informed consent and interviews were conducted in a private place. A semi-structured interview with invitational questions developed by the research team was used to guide the discussion. The interview was in Kinyarwanda language and recorded. Whenever study participants felt not to be recorded, the researcher stopped the recording process and noted down some key elements after getting consent from the participant. The shortest interview was 51 min while the longest interview was 1h43min. After the interview, each study participant received a CAD 10 honoraria (8,000 Rwandan francs) to compensate for their time, meal, transport, and airtime communication.

Data construction and analysis

Data collection was conducted concurrently with data analysis, i.e. it was an iterative process. In ID, data engagement starts as soon as the researcher enters the field to confirm, test, explore, and expand on the themes and concepts being explored (Thorne, 2016). Sorting and organizing data were done using Dedoose software. Data were thematically analyzed (Braun & Clarke, 2006).

Findings

In this study, 12 MCHWs were recruited to participate. The majority were aged > 40 years old and most had attained senior 3 high school. All of them were females (Table 6.1).

Table 6.1. Socio-demographic characteristics of MCHWs

No	Pseudonym	Age	Gender	Level of education	Experience as MCHW
1.	MCHWA	48	Female	Senior 3	3 years
2.	MCHWB	44	Female	Senior 2	2 years
3.	MCHWC	56	Female	Senior 3	5 years
4.	MCHWD	43	Female	Senior 2	4 years
5.	MCHWE	42	Female	Primary 6	4 years
6.	MCHWF	41	Female	Primary 5	2 years
7.	MCHWG	63	Female	Senior 3	12 years
8.	MCHWH	54	Female	Senior 3	5 years
9.	MCHWI	38	Female	Primary 6	9 years
10.	MCHWJ	43	Female	Senior 1	8 years
11.	MCHWK	50	Female	Senior 3	11 years
12.	MCHWL	46	Female	Senior 2	3 years

In this study, seven KIs were interviewed. Four were the head of health centers and the majority had over 5 years of experience in this role. Three were the community health officers who are supervising the MCHWs activities (Table 6.2).

Table 6.2. Socio-demographic characteristics of KIs

No	Title	Age	Gender	Level of education	Working experience
KI1	Head of the health center	45	Male	A1	15 years
KI2	Community health officer	34	Male	A0	7 years
KI3	Community health officer	36	Male	A0	6 years
KI4	Head of health center	48	Female	A0	17 years
KI5	Head of health center	42	Male	A1	1 year
KI6	Community health officer	30	Female	A0	1 year
KI7	Head of health center	36	Male	A1	1 year

In this study, we sought to elucidate the MCHWs' experiences working with adolescent mothers in the community as part of perinatal services. Four conceptual themes were identified with their sub-themes: a) promoting safe adolescent pregnancy and motherhood (continuity of care, a MCHW as a liaison, relational engagement, and tailored home visits); b) facilitators to connect with adolescent mothers (loving the job, peer support and collegiality, and structural support); c) contextual challenges

(handling disclosure, dealing with adolescent mothers' financial constraints, difficulties in accessing adolescent mothers, and transportation); and d) vicarious trauma (impact of adolescent mothers' stories on MCHWs' daily activities) (Table 6.3).

Table 6.3. Major Themes and Sub-themes

Themes	Categories
Promoting safe adolescent pregnancy and motherhood	Continuity of care A MCHW as a liaison Relational engagement Tailored home visits
Facilitators to connect with adolescent mothers	I love this job Peer support and collegiality Structural support
Contextual challenges	Handling disclosure Dealing with adolescent mothers' financial constraints Difficulties in accessing adolescent mothers Transportation
Vicarious trauma	Impact of adolescent mothers' stories on MCHWs' daily activities

Theme 1: Promoting Safe Adolescent Pregnancy and Motherhood

Modifying reproductive health behaviours is one of the strategies used to enhance adolescent mothers' safety in their communities, including supporting a reduction in the number of deaths from pregnancy-related causes. These strategies include the provision of continuity of care, acting as liaison (in perinatal services, family, and local services), developing a MCHW-adolescent positive relationship through relational engagement, and tailoring home visits to the unique needs of the adolescent.

Continuity of Care. The normative roles of MCHWs overseeing the care of mothers and their newborns in Rwanda include providing specific services to pregnant women and new mothers and their infants up to 2 months old. An example of this would be antenatal contacts. In their localities, MCHWs identify, register, and refer

pregnant women to health centers for antenatal care. Given the unique needs of adolescent mothers, MCHWs play an important role in care provision from the time they suspect that the adolescent mother is pregnant to delivery, and on to when her baby is approximately 2 months old – referred to as provision of "continuity of care." As one MCHW said,

> *Mainly, my work includes visiting them [adolescent mothers] frequently, providing advice whenever necessary, escorting them to the health facility, and making a follow-up. I escort them because they sometimes do not want to go alone because of stigma. I do this when I realize she is pregnant until her baby has grown.* (MCHWA)

Another MCHW also reported,

> *My role would be to promote the adolescent mother's health from the time I realize she is pregnant. When the health center confirms it, I monitor her to see if she abides by what the healthcare providers told her, for example, appointments for antenatal care, eating healthy and any other health topic important to a pregnant mom. After birth, I ensure that she is breastfeeding well. I monitor this by measuring the baby's growth until the baby is grown-up. I also encourage vaccination.* (MCHWG)

MCHWs primarily provide this kind of care to support that ongoing health of adolescent mothers and their babies. A MCHWD elaborates further below,

> *I often visit pregnant adolescent patients throughout their pregnancy as well as after they have given birth. I go to their places since we do not want them to feel uncomfortable in the community. I ensure that I follow her up from day one until she no longer needs the health center's appointments. My role is to ensure that all appointments are followed up, and in case she has a problem; I would immediately take her to the health center or call an ambulance.*

These MCHWs expressed a desire to provide continuity of care and build trust with the adolescent mother to support safe care. According to the MCHWs due to stigma associated with adolescent pregnancies, adolescent mothers have developed coping strategies such as avoiding walking through the community to see the MCHWs so they are not seen as accessing perinatal services. MCHWs accommodate the adolescent mothers needs by travelling to the adolescent mother, i.e., they tailor their practice to the unique features of caring for adolescent mothers. This practice reflects

MCHW's understanding of the impact of stigma and associated trauma and potential violence.

MCHWs as Liaisons. Some MCHWs promote safe motherhood by acting as the liaison between perinatal services and the adolescent to ensure that adolescent mothers get health services as soon as they are identified in the community. For example, a MCHW reported, *"My work is about identifying them [adolescent mothers] in the community so that I can advise them to go to the health facility."* (MCHWG) Another MCHW also noted,

> *Our role is to advise these adolescents and let them know that the healthcare providers will help instead of hiding in the community. We show them that the health center is the safest place compared to anywhere they are.* (MCHWF)

Identifying adolescent mothers in the community and encouraging them to go to the health facility was felt by MCHWs to increase their access to perinatal services as early as possible, i.e., the right time.

When adolescents become pregnant, it may create conflicts in families and depending on the family members' level of understanding, the adolescent may be abused or even abandoned. As a study participant said, *"Teenagers are sometimes abused by their families because they do not understand and accept what has happened to them. I do not only deal with the adolescent mother; I also work with the family."* (MCHWD) Another participant further explains their role in the following,

> *What we do for them is mainly to reconcile them with their families because after they have gotten pregnant, their families tend to blame and reject them for what happened to them. So, we approach their families to teach and advise them. We tell them that she is a child like any other and that what happened to them can happen to anyone else. I tell them that rejecting her would affect her and the unborn baby. I start to encourage them to support her in this journey.* (MCHWJ)

Here the MCHW is acting as a liaison between the adolescent mother and her family; they are working to support the provision of an emotionally and physically safe place

for the adolescent mother and her unborn child to minimize the potential for abuse or perhaps further abuse of the adolescent mother and promote the overall health and well-being of the adolescent and their baby.

Some MCHWs reported that sometimes they link the adolescent mothers and the family with the local authorities for further investigations in case of rape or other abuses. One study participant highlighted the following, *"I work closely with the local authorities because some of those adolescents had been abused especially sharing information with them [local authorities] so they can do something about it."* (MCHWK) Another study participant shares an experience in the following:

> *When I got there, it was apparent that she [adolescent mother] was pregnant, but I kept trying to let them admit it on their own without success. So I went to the village authority to seek help because I was afraid of the consequences that it might lead to as her mother and the adolescent kept denying the pregnancy.* (MCHWB)

In this case the adolescent mother and her mother had refused to go to the health facility regardless of the physical signs of anemia related to pregnancy. In both cases, the MCHWs involved local authorities because they were worried about the safety of the adolescent mother. In community, a local leader has the authority to make decisions on all matters related to the responsibilities of a cell following the laws, orders and instructions adopted by a superior body.

A few MCHWs also reported that they advocate for adolescent mothers to the local authorities to support them since most of them struggle to satisfy their basic needs. As one said, *"Some [adolescent mothers] don't have health insurance, but we keep trying to advocate for them to the different level authorities so they can support them."* (MCHWB) Liaising with local authorities and advocating for adolescent mothers was seen as a necessary role to protect and support adolescent mothers and

their babies. Adolescent mothers face multiple inequities that act as barriers to accessing healthcare services – a reality that MCHWs need to troubleshoot.

Relational Engagement/Inquiry. Engaging with the adolescent mother to build rapport and trust was another important element of care reported by many MCHWs. For example, a study participant said,

> *Sometimes, she [adolescent mother] might not eventually talk during the first visit because she is sad and crying whenever she tries to speak. All I do is comfort her and try to make her feel comfortable, and after that, she talks and tells me everything.* (MCHWJ)

Study participants reported different strategies used to build the positive relationship with the adolescent mothers, as reflected in the following:

> *I must behave or possess parental values; otherwise, she [adolescent mother] won't share anything with me. So as a parent, I have a responsibility to know and try to address any issues she is struggling with. For example, some are new in the area and searching for a home; others might even be hungry; I have to help them.* (MCHWA)

> *When you visit them [adolescent mothers], you give them space to let their feelings flow, like when they want to cry, you let them do it, but after, you approach to comfort them. You try to counsel them slowly and listen to them. We help them understand that life continues after what happened to them; we use real-life examples of people who went into the same situation and how they overcame it.* (MCHWD)

Relational engagement entails getting to know the adolescent mother and the contextual features of her life (e.g., financial constraints and other social determinants) so the MCHWs can assist adolescent mothers to address their basic needs; they often provide counselling to foster connection and trust with adolescent mothers.

Tailored Home Visits. The majority of MCHWs reported that visiting adolescent mothers takes time and needs to be an ongoing process for them to talk and/or admit that they are pregnant. As one participant noted,

> *I approach her [adolescent mother] today, and it fails, I leave, but I will come back the next day. Our task is to stick with her until she opens up and tells you what she couldn't tell, even her mother.* (MCHWF)

As another MCHW said,

> *It is not easy; they want to keep information private. They give us a hard time when we first visit. For example, admitting that they are at least pregnant is not easy. That's why I need to go slowly until they accept to be approached.* (M*CHWC*)

It took time to engage relationally and build rapport and trust with many of the adolescent mothers. The MCHW supervisors echoed this sentiment. As one supervisor noted, *"We know that our MCWHs are working hard to meet the needs of adolescent mothers. They spend too much time and energy trying to get them to the health center."* (KI3) MCHWs structured their work according to the adolescent mothers' unique needs; they "tailored home visits" and structured their time accordingly. As another MCHW noted,

> *There's an adolescent mother; she's 18 years old. We are still determining who her father and mother are. It is believed to have re-married somewhere else. So she lives with her poor old grandmother, who is around 80 years old. This makes life very hard; they need food and clothes. With the current situation of this girl, the older woman's sons find it hard to support all of them, which may affect the girl's behaviours. She's the most-stubborn in my care. I hardly see her home when I visit, most of the case I leave a message to her grandmother to tell her that I miss her because she mostly gets home late in the evening or late at night or she doesn't come home at all. Sometimes I go there late evening to see if I can meet her. Luckily sometimes I find her there. It takes work.* (MCHWA)

Adolescent mothers in Rwanda are often living in precarious circumstances related to material and other social circumstances. The role of the MCHW is shaped by the need to provide care that is responsive to the unique needs of the adolescent during this time. These volunteers often went out of their way to support the adolescent mother.

Theme 2: Facilitators to Connect with Adolescent Mothers

Despite working in complex situations and environments, the MCHWs reported numerous facilitators that help them work with adolescent mothers, including being passionate about their roles and engaging peer support and structural support.

'I Love this Job'. MCHWs are volunteers and reported that they love their job, which motivated them to keep working with adolescent mothers in the community. One study participant highlighted,

> *We are volunteers and don't work for salaries or wages; we do everything for the love of our country only. As we hope our duties have a positive impact on the community. So we try our best to help the community whenever we can and anytime. The only motivation is the outcome of my work. We feel proud to help adolescent mothers, and it makes us happy.* (MCHWA)

In a similar vein, another study participant said the following,

> *This work is the work we are passionate about. We don't regret it. We can leave other jobs we were doing for this. We are devoted to helping them [adolescent mothers] because we know our work will result in a bright future for them. I love this job.* (MCHWI)

MCHWs showed interests of working with adolescent mothers despite the challenges associated with their role – they prioritized the adolescent mothers emotional and physical safety and led with the hope that this work would make a difference.

Peer Support and Collegiality. To exercise their roles of caring for adolescent mothers, a role they consider demanding, MCHWs recognized the support from their colleagues. As one study participant said, *"I learn from my colleagues on many cases they face, especially for adolescent mothers. During our discussion, you realize that they face interesting cases, and I may share my experience too."* (MCHWH) In a similar context, another study participant shared the following, *"We must collaborate and work together in our villages. We have to put together and share our knowledge and information so we can find durable solutions for the problems that those*

adolescents face." (MCHWE) MCHWs shared the perspective that by collaborating they could find solutions to address the issues adolescent mothers face: to draw awareness to the detrimental effects of trauma and violence on the lives and wellbeing of adolescent mothers.

Structural Support. Even though MCHWs are volunteers, the government of Rwanda tries to support their work by availing some materials, incentives, continuous support and training. For example, as a MCHW said,

> *Our healthcare center arranges training if there's something new to share and learn. They call us and give us training. That is the main foundation we use. They can guide us on how to care for adolescents in our community… [However]when an adolescent is about to give birth, that's something out of my scope of practice because I am not a midwife. I have to call my supervisors and make requests, for instance, an ambulance or assistance.* (MCHWA)

This support also was noted by a manager of the health center who said, *"We make sure to assist them [MCHWs] whenever they call us"* (KI7) as well as a supervisor of MCHWs who added, *"We do regular visits to find out if they met any challenges so we can assist to handle them."* (KI2)

However, not all CHWs reported feeling adequately trained or supported. As one MCHW noted, *"Well, my counselling knowledge is limited…Sometimes, you face a more challenging case than the ones you knew before or your knowledge. You feel like there is a gap."* (MCHWK)

The same concern also was reflected in the study participants' recommendations to improve perinatal home visits. As a MCHW highlighted, *"The most needed thing is training to broaden our knowledge to help us handle any situation regarding adolescent mothers we may face,"* (MCHWH) and as another MCHW noted *"Since I joined them [MCHWs], I did not receive any training, but probably others have attended them."* (MCHWF)

Although there was a mixed response to training, all participants acknowledged its importance. In this study, the reviewed MCHWs training module in use published in 2010, has a section entitled *visiting a pregnant woman at home,* devoted to community maternal health workers-home-based care of a pregnant woman. However, there is no mention of the care of adolescent mothers rather it discusses the care of pregnant woman in general. The MCHWs training is adult woman focused. Supervisors of the MCHWs recommended having specific training to better care for these adolescent mothers in the community. For example, as one supervisor said, *"I also suggest providing more training to MCHWs on managing the challenging cases of adolescent mothers, such as trauma."* (KI3) In the context of TVIC, the MCHWs' narratives reflect that MCHWs are not at a level of knowledge and skills to address, as one example, trauma and violence and their impacts on the lives of adolescent mothers.

Theme 3: Contextual Challenges

During analysis, some challenges faced by MCHWs were identified such as handling disclosure, financial constraints, difficulties in accessing adolescent mothers, and transportation issues.

Handling Disclosures. Some MCHWs shared how they engage with adolescent mothers to gather information related to pregnancy. One participant said, *"I make sure that they [adolescent mothers] talk, and sometimes we need to know the perpetrator so that the local authorities arrest him. However, some of them do not tell this to either their parents or us."* (MCHWD) Another study participant expressed the same concern and added that she does everything possible to get information from the adolescent mother, *"If they do not want to talk, I can call the local authorities to help me. No challenge can make us give up on any of them."*(MCHWE) In this context,

another participant added that she uses a different way of taking the adolescent mother to the health facility when they refuse to talk, *"I asked who raped her so they could arrest him, they kept quiet. I insist, but still, most of them do not talk. So I give up and take them to the health facility."* (MCHWC) A few of the MCHWs felt it was important for the adolescent mothers to share who their perpetrators were to the authorities – usually with little success. Although the MCHWs had good intentions, i.e., they wanted the perpetrators to be held accountable for their actions, they were not attuned to the readiness of the adolescent to disclose. Another study participant added another perspective as reflected in the following quote,

> *Many adolescents don't know the perpetrators' full names due to different circumstances. For instance, they get impregnated by people not residents of their current areas, so they will only know probably one name, which is hard for them. Even though they have been abused, their parents keep harassing them, asking for the names of those who did it to them, which may upset her.* (MCHWL)

This MCHW recognizes that asking the adolescent mother her partner's name is upsetting and embarrassing. In this study, the handling of disclosures was found by all MCHWs to be challenging and there was variability in understanding how to do this.

Financial Constraints. Since they are volunteers, most MCHWs reported spending their out of pocket money to solve adolescent mothers' problems, such as transport and paying for clothes and food. One study participant said *"Sometimes you have to help these adolescent mothers in whatever way you can. I can pay little money for some stuff. When I take her to the health center, I can pay for her transport when it's far."* (MCHWE) Other participants shared their stories of what happened to them when caring for adolescent mothers,

> *For example, sometimes a problem needs money to be solved, and you don't have it at that moment. Let's say you promised her [adolescent mother] to help during her baby delivery, which occurs unexpectedly. This becomes very challenging as sometimes getting the money will take work. But as our duties*

> *are almost similar to that of soldiers, we do whatever we can and help them; you need a means of transport to get her to the hospital.* (CHWC)

Another participant said,

> *She [the adolescent mother] had no clothes. She had neither those basic needs for the mother nor the baby. When we got to the hospital, as MCHW, we tried to do everything possible to help her, we found some clothes and food, and we did that for her for three months until she moved to another place we didn't know.* (MCHWD)

In this study, MCHWs addressed the social determinants of health which could impact adolescent mothers' access to and utilization of healthcare services. It's challenging for MCHWs since they are volunteers and do not earn monthly salaries. However, they collaborate with other MCHWs and staff to find basic resources to help adolescent mothers as one supervisor explains, *"Well, we help MCWHs who inform us about an adolescent mother who needs support."* (KI6)

Difficulties in Accessing Adolescent Mothers. Most MCHWs mentioned that finding adolescent mothers in their homes or locating them takes a lot of work. One study participant said: *"Sometimes, you will need help finding them home or going to the wrong address"* (MCHWA). In a similar context, she highlighted how they can spend more time looking because they are not available for the scheduled visits,

> *Let's say you have to visit two adolescent mothers today, and they live in different locations where you have to travel a long distance in between, then you end up finding none of them that day. That is a very big problem, but we must go back the next day.* (MCHWA)

The majority of the study participants added that parents also act as barriers to access adolescent mothers as one MCHW said *"Challenges we face are moments like when parents hide adolescent mothers when you visit them. They even deny that she is there. Most challenges come from parents."* (MCHWF) In a similar vein another MCHW said, *"Sometimes, parents disrespect us by denying us entering their homes."* (MCHWG) A supervisor of MCWHs also noted this phenomenon,

"Hmmm…we still have parents who hide them… They do not want MCHWs to access them," (KI1) and another supervisor also spoke to this challenge, *"I have been called several times by MCHWs seeking help for parents who refused them entry into their home. MCHWs have information, but they cannot enter."* (KI6)

Transportation. Some MCHWs said that they might travel a long distance to reach an adolescent mother due to the area they cover. As one MCHW said, *"I may need to visit an adolescent mother, but she stays far. I need some means of transport to get there. When I do not have them, it might delay my visit."* (MCHWI) Another study participant shared the same challenge:

> *During home visits, we carry books, sometimes 3 to 4, and we have to do a long distance, which is tiring as the books are heavy plus the long distance we cover … … sometimes you can get an emergency call to attend to one of them [adolescent mothers] late at night, and sometimes it will even be raining and all.* (MCHWI)

Here the MCHW also notes the unexpected challenges that may arise when conducting home visits. Lack of means of transport can delay the home visits or impede MCHWs from attending emergency calls. Some MCHWs added that these problems most often happen to adolescent mothers without family support.

Theme 4: Vicarious Trauma

Some study participants expressed that sometimes they are emotionally affected by the adolescent mothers' stories and living conditions. As the following participants note:

> *You know, sometimes, I get carried away by them [adolescent mothers' stories], especially when I am alone. I get sad, but I try to overcome those thoughts because I can't be able to help them if I can't help myself.* (MCHWH)

> *To every single case, especially those who do not have support from their families. You might find that one is your neighbour or your friend's daughter. When you are talking to her, she may cry, and you can cry too when you even do not have something to help her in terms of financial means. It is overwhelming! They are our daughters too…. It is tough to absorb it. You can't sleep when you imagine that it might be your daughter.* (MCHWC)

> *I felt sad. I feel bothered by it so much. I feel sad because I see that their [adolescent mothers] future is destroyed; they drop out of school and will suffer, and so on. I pray to God silently to save my children from ever facing such a thing. But at the end of the day, we have responsibilities. I can't let feelings stop me from taking care of them. Not only that, but some might also be poor.* (MCHWJ)

Here MCHWs witnessed how they are affected by the stories of adolescent mothers in their daily lives; responses which reflect a significant risk for the negative effects of vicarious trauma.

Discussion

This study explored MCHWs' experiences caring for adolescent mothers in the community. Four main themes were identified: promoting safe adolescent pregnancy and motherhood, facilitators for connecting with adolescent mothers, contextual challenges, and vicarious trauma.

MCHWs reported different strategies they used to enhance adolescent mothers' safety in their communities. They reported that their roles included identifying a pregnant adolescent and providing consistent care from the first day to when the baby is two months old. The core role of MCHWs to ensure continuity care was also found in other settings in Rwanda (Taylor et al., 2017; Tuyisenge et al., 2020). MCHWs play a crucial role in Rwandan communities. This includes identifying and registering pregnant women and encouraging them to use ANC. They also advise expectant mothers on birth preparedness and encourage them to deliver in health facilities. For home visits, they ensure that pregnant women take an HIV test and have insurance and that their basic needs, such as nutrition, use of insecticide-treated bed nets (ITNs) and hygiene, are covered (Rwanda Governance Board [RGB], 2017).

From the study participants' narratives, it was found that the MCHWs act as liaison between adolescent mothers and perinatal services, family, and local services. In African and Asian settings, MCHWs track pregnant woman and refer them to the health facilities and involve local authorities whenever possible (Kalisa et al., 2018; Olaniran et al., 2019; Tuyisenge et al., 2019, 2020). MCHWs should consider the needs of adolescent mothers when involving local authorities to ensure that it's the right time to do so. In the present study, MCHWs support adolescent mothers by developing a positive relationship through relational engagement. It is well documented that MCHWs increase access to care among community members by forming a positive relationship with households (Ndambo et al., 2022). Adolescent mothers are vulnerable and require more support and resources. MCHWs stated that they add extra home visits for adolescent mothers compared to the adult moms due to their unique needs. This is in line with TVIC principles that programs and services should be flexible enough to accommodate people's different journeys and be tailored to their needs (Wathen & Varcoe, 2019).

In the current study, MCHWs reported numerous facilitators that helped them work with adolescent mothers. These facilitators include being passionate about their roles, peer support, and structural support. All MCHWs reported that they love helping adolescent mothers and feel fulfilled even though they work as volunteers. MCHWs in other studies stated that making a difference in their clients' lives is rewarding (Rodriguez et al., 2022; Schurer et al., 2020). A few MCHWs reported that, when they faced challenges caring for adolescent mothers, they sought advice from their colleagues. In another study, MCHWs highlighted peer support as the strategy they use to take care for adolescent mothers with complex issues. Even though some MCHWs reported that they receive training, others mentioned that they did not

receive any specific training to care adolescent mothers, and others reported that they need more training; generally, they identified gaps in their knowledge and skills to care adolescent mothers. These results are consistent with the findings from the studies which have been conducted in African and Asian countries (Henning et al., 2020; Olaniran et al., 2019). In other studies in Rwanda MCWHs reported that the training they receive are irregular and they lack an ongoing mentorship (Condo et al., 2014; Schurer et al., 2020; Tuyisenge et al., 2020). In their study, Olaniran et al., (2019) found that sometimes the expectations for MCHWs are beyond their scope of practice when providing maternal health services and suggested they be provided more training. Evidence shows that CWHs need support and regular mentorship and supervision to ensure they provide quality home visits (Katzen et al., 2022; Olaniran et al., 2019; Rodriguez et al., 2022; Roux et al., 2020).

MCHWs face several challenges when caring for adolescent mothers in the community. These challenges include handling disclosure, financial constraints, difficulties in accessing adolescent mothers, and transportation issues. A few of the MCHWs pressured adolescent mothers to speak out about their situations related to who got them pregnant (rapist or perpetrator) and how the relationship started. Sometimes when an adolescent mother did not want to say anything, MCHWs involved local authorities. All the MCWHs who reported this issue thought that it was good to help the adolescent mothers arrest the perpetrator. However, this would lead to re-traumatization of the adolescent. It has been observed in other studies that community health workers have limited knowledge in handling disclosures of individuals experiencing violence and these studies suggested more training for community health workers to handle health sensitive areas (Ndambo et al., 2022; Saboori et al., 2022). According to the TVIC principles, in order individuals to

receive respectful and safe care, it should not be necessary for individuals to disclose trauma and ongoing violence to get care (Wathen & Varcoe, 2019).

MCWHs face financial constraints when dealing with adolescent mothers. MCHWs are volunteers and do not earn a salary. However, there are situations where they need to assist adolescent mothers, for example, by getting the adolescent to the health center or providing for basic needs such as food and baby clothes. The same concern was also reported in another study in Rwanda whereby MCHWs pay out-of-pocket to assist mothers to get to the health facility in case of emergencies (Schurer et al., 2020; Tuyisenge et al., 2019, 2020). However, this is a tremendous burden for MCHWs.

Another challenge highlighted by MCHWs in this study is that sometimes it is not easy to access adolescent mothers due to parents who deny them to access the adolescent or any information. In contrast, in another study conducted in South-Africa, it was reported that adolescent mothers are encouraged by their mothers to access perinatal services (Erasmus et al., 2020). This might be related to differing socio-cultural and contextual factors. Another challenge which was reported by MCHWs was the lack of transportation means when they want to visit adolescent mothers. Lack of transportation was also reported in other studies as an important challenge faced by MCHWs to attend to the needs of expectant mothers (Ahmed et al., 2022; Ndu et al., 2022; Olaniran et al., 2019; Tuyisenge et al., 2020).

Some study participants expressed that sometimes they are emotionally affected by empathetic engagement with the adolescent mothers' stories and living conditions. Findings from one study in the United States of America revealed that the emotional costs might be also related to lack of resources to help vulnerable people

(Rodriguez et al., 2022). The MCHW should be supported in mitigating vicarious trauma and directed to available resources such as self-care and mental health support.

Conclusion

MCHWs play an essential role in supporting adolescent mothers in Rwanda by promoting safe adolescent pregnancy and motherhood through the provision of continuity of care, acting as liaisons (in perinatal services, family, and local services), and tailoring home visits to the unique needs of the adolescent. MCHWs reported numerous facilitators that helped them work with adolescent mothers, including being passionate about their roles and the inclusion of peer and structural support. However, from the study participants' narratives it is clear MCHWs face several challenges when working with adolescent mothers. These challenges include handling disclosure, financial constraints, difficulties accessing adolescent mothers, and transportation issues. Lastly, MCHWs are affected by vicarious trauma due to the life challenges adolescent mothers face. Therefore, there is a need to ensure that MCHWs are financially supported to deal with the financial constraints adolescent mothers experience. In addition, trauma- and violence-informed care training, supervision and ongoing mentorship are needed to support the role of MCHWs. Interventions to support parents of adolescent mothers are highly recommended to facilitate easy and safe access to perinatal services for adolescent mothers.

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Chapter Seven: Summary of the Key Findings, Study Implications, Recommendations, and Conclusions

The primary purpose of this study was to explore how perinatal services support adolescent mothers' experiences to inform the delivery of trauma- and violence- informed care (TVIC) in Rwanda. This study sought to answer the following research questions: 1) what are the experiences of adolescent mothers accessing and utilizing perinatal services in Rwanda; 2) what are the experiences of perinatal nurses and midwives when caring for adolescent mothers; 3) what are the experiences of maternal community health workers (MCHWs) when connecting with adolescent mothers; and 4) how can TVIC be integrated into perinatal services in a culturally safe way?

Interpretive description (ID) Thorne (1997, 2016) was used to explore the expected practices (as stated in two relevant guideline documents) and the actual experiences of receiving and delivering care, through individual interviews with adolescent mothers, nurses and midwives, MCHWs, managers of health centers, and supervisors of MCHWs in eight clinics delivering perinatal services in eastern Rwanda. Throughout this chapter, the study's findings are summarized, emphasizing the central insights and implications that can be drawn from them. Recommendations are derived from the study's findings to support nursing education, TVIC practice and policy, and future research.

Summary of the Key Findings

Adolescent mothers reported mixed experiences when accessing and utilizing perinatal services: from tailored care to the re-creation/activation of trauma. A few reported that due to their unique challenges as new and young mothers, maternal

community health workers (MCHWs), nurses and midwives supported them through the care journey, providing emotional and psychological support, and empowering them. However, most adolescent mothers in this study reported negative experiences accessing and utilizing perinatal services. These experiences resulted in the re-activation of previous trauma, and in many cases experiences of new trauma, caused primarily by interpersonal violence and structural and institutional barriers. For some women, especially those who were impregnated against their will, a male healthcare provider was an additional form of harm.

Perinatal nurses and midwives reported that when caring for adolescent mothers, their roles expand beyond their usual scope of practice, and often require them to use their own parenting skills, which may pose professional boundary issues. Their narratives also revealed that due to the unique needs of adolescent mothers, relational engagement was of central importance. They perceived individual challenges in providing care, used workarounds, and felt at risk of developing vicarious trauma. When connecting with adolescent mothers in perinatal services, all nurses described caring for an adolescent mother as challenging and time-consuming. Hence, several participants aimed to be creative, flexible, and actively listen to adolescent mothers. The narratives also revealed that nurses and midwives perceived personal challenges that hindered providing quality care to adolescent mothers. These challenges included a lack of knowledge and skills specific to this patient group, and being a male healthcare provider. Most nurses and midwives used workarounds in perinatal care provision with adolescent mothers because of stringent guidelines for some activities, a lack of protocols and procedures for others, gaps in training, and the nature of the perinatal environment. Some study participants reported that they became deeply invested in adolescent mothers' stories and were often consumed with

related thoughts and concerns in their personal lives. They reported that sometimes they experienced the emotions of adolescent mothers, became depressed or projected the same stories onto their children, including prompting them to become more or overly protective of their own daughters.

MCHWs interviewed for this study recounted their experiences working with adolescent mothers in perinatal home visits. These experiences included promoting safe adolescent pregnancy and motherhood, the utilization of facilitators to connect with adolescent mothers, the perception of contextual challenges, and vicarious trauma. They reported that visiting adolescent mothers required special attention. Several strategies were employed and included providing continuity of care, acting as a liaison (in perinatal services, family, and local services), developing a positive relationship with young women through relational engagement, and tailoring home visits to the women's unique needs. The facilitators for successful home visits included being passionate about their roles, peer support, and structural support. However, there also were many challenges when visiting adolescent mothers, including handling disclosures (for example of abuse), financial constraints, difficulties accessing adolescent mothers, and transportation issues. From the study participants' narratives, it was revealed that MCHWs are at risk of developing vicarious trauma.

There is a disconnect between the quality of care reported by the nurses and midwives and the experiences of the adolescent mothers. Nurses and midwives reported caring for adolescent mothers as clients with unique challenges through non-judgmental care, advocacy and psychological safety. However, most adolescent mothers reported negative experiences in perinatal services, including judgmental care

and interpersonal violence. This may be related to the social desirability response. In qualitative research, social desirability is defined as how an individual presents themselves in a way that is perceived as socially acceptable but does not entirely reflect reality (Bergen & Labonté, 2020). It is very common in research on sensitive or controversial topics where individuals do not want to expose their unacceptable behaviors, practices and attitudes (Grimm, 2010). Different strategies can be used to discuss and mitigate the effects of social desirability including pre-field training of data collectors, and regular debriefing meetings (Bergen & Labonté, 2020), which we undertook in this study, with mixed effects.

Study Recommendations

This study has many potential recommendations for practice, education, research, and policy. Building on the recommendations, a framework for integrating TVIC into perinatal services was developed using TVIC principles. The recommendations used to develop the framework are grounded in the study participants' findings and the document review.

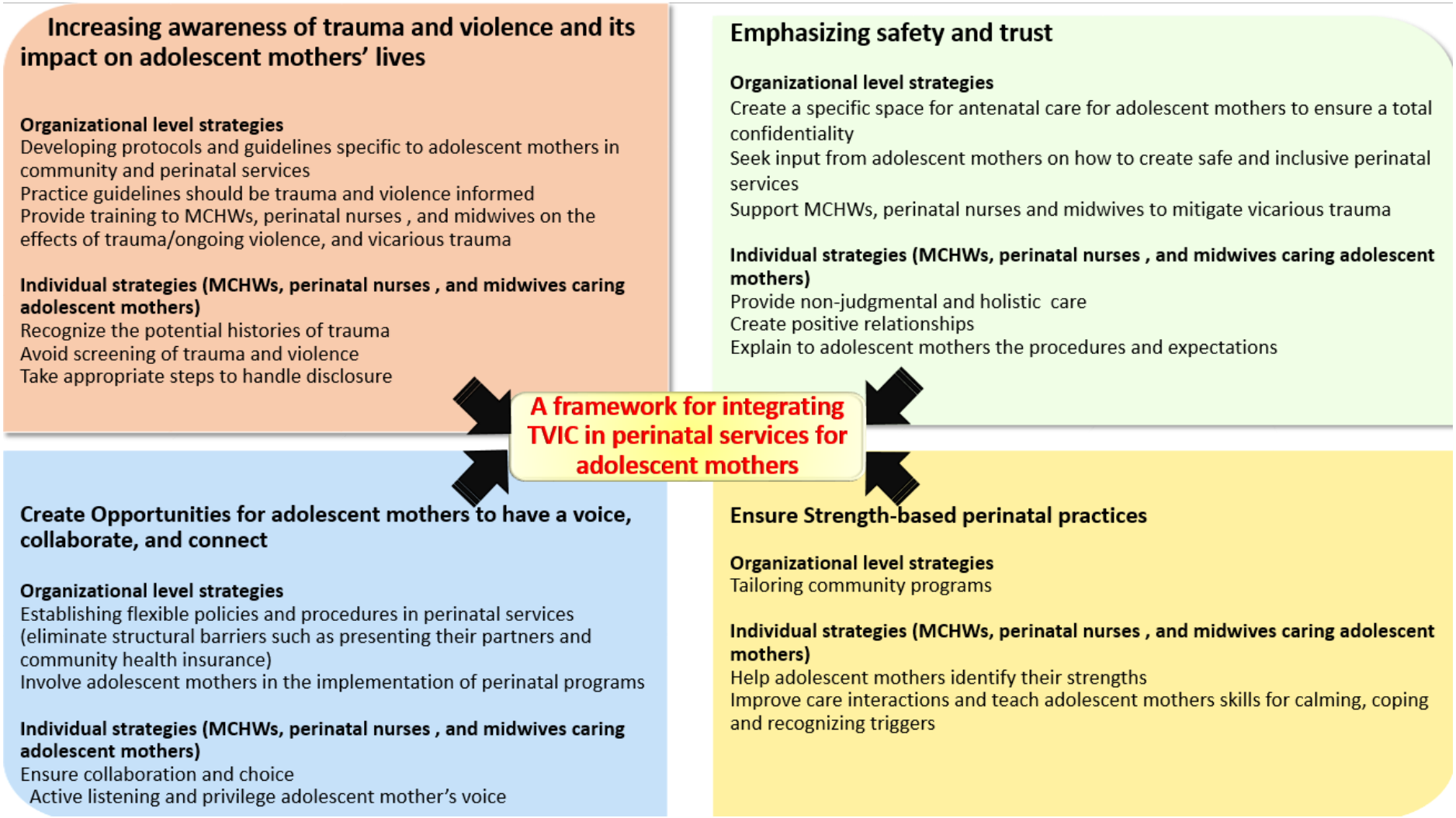

Figure 7.1 A Framework for integrating TVIC into Perinatal Services

The above diagram illustrates different strategies on how TVIC, based on the four principles articulated by Wathen & Varcoe (2023) can be integrated into perinatal services in a culturally safe way based on the triangulation of findings from adolescent mothers, MCHWs, perinatal nurses and midwives, key informants, and documents reviewed. These strategies are organized at the system, organizational, and individual levels, recognizing that individual practice change cannot occur without structural changes and supports for TVIC.

Increasing awareness of Trauma and Violence and its Impact on Adolescent Mothers' Lives

Organizational Level

Developing Protocols and Guidelines Specific to Adolescent Mothers. Across the findings, it was reported that there is a need to develop community and clinical guidelines specific to adolescent mothers' needs in perinatal services. The existing Antenatal Care (ANC) guideline has little information related to the care of adolescent mothers. The reviewed community maternal and child health training module has no information tailored to adolescent mothers' needs, instead discussing girls and pregnant women in general. This means that there is nothing to guide providers in the care of adolescent mothers specifically, which puts them at risk of not getting the proper care and support they need. Furthermore, given the complexity of both their needs and the vulnerability of their social contexts, lack of specific guidance can lead to adverse effects on the health of both the mother and her child. As a result, it is essential to develop specific guidelines for MCHWs, perinatal nurses and midwives to ensure that adolescent mothers receive the

best quality care. The responsibilities of MCHWs for home visits are generally not geared towards the needs of adolescents. MCHWs, nurses, midwives, managers of the health centers, and the supervisors of community health workers suggested having guidelines that are tailored to adolescent mothers' needs. These guidelines, policies, and protocols should be trauma- and violence- informed to support the prevention of re-traumatization and to address the unique needs of adolescent mothers, especially regarding the mental health impacts of previous trauma experiences in general, and related to their pregnancy. For instance, as seen in some interviews, referencing the term "husband or partner," does not always reflect the experiences of these pregnant adolescents.

Knowledge Shift. Different study participants, including MCHWs, nurses, midwives, and key informants, highlighted the need for education and training, aligned with changes to practice documents, to care for adolescent mothers in perinatal services. This need was reflected in the poor experiences of care reported by adolescent mothers in the study. Education and training would offer healthcare staff a thorough understanding of trauma and violence, specifically systemic and structural violence, as well as the impact of these on adolescent mothers' lives and behavior. It also would serve as a practical guide on how perinatal services should provide care that is trauma- and violence- informed. One of the main principles underpinning TVIC is that trauma and violence are universal, i.e., that anyone accessing services could have this history either through direct experiences or acute and/or chronic / complex trauma, or through the experiences of those close to them. In Rwanda, the 1994 Genocide against the Tutsi is an extreme form of structural violence that still affects Rwandans today. In this case, in the Rwandan perinatal environment, this collective trauma means that adolescent mothers with intergenerational trauma are often

interacting with healthcare providers with their own trauma histories. Trauma awareness means understanding the high prevalence and potential impacts of these experiences, both on people's willingness and ability to access health services, and on their health status. The ANC guideline indicates that *"special training is required to work with adolescent mothers, and the special considerations in the guide do not replace the special training."*

While working with adolescent mothers with histories of trauma and violence, MCHWs, nurses, and midwives have reported experiencing physical and emotional symptoms of distress as a result of their engagement with the stories of these adolescents. Symptoms such as these interfere with their ability to provide competent care. Thus, the responsibilities of organizations to mitigate vicarious trauma include providing opportunities for reflective supervision and staff-initiated debriefing, encouraging informal supports and debriefing, providing trauma training, including a focus on structural violence and inequities and their impacts, ensuring a mix of caseloads such that providers are not only seeing the most complex cases, and recognizing that factors that may put staff at increased risk of vicarious trauma (Sutton et al., 2022, Wathen & Varcoe, 2023).

Individual strategies (MCHWs, perinatal nurses, and midwives caring adolescent mothers)

MCHWs, perinatal nurses, and midwives should be educated to recognize the potential histories of trauma among their clients, and how this may present and impact a care interaction. In this study, adolescent mothers accessing perinatal services often had a history of trauma and/or were experiencing ongoing violence. In some cases, nurses did

not take this into consideration when caring for the adolescent, which resulted in re-traumatization. The ANC document highlights that perinatal nurses and midwives should screen for IPV, but it does not indicate how this should be done. According to the TVIC principles, however, routine screening of experiences like IPV can re-traumatize a client. The WHO Clinical Handbook talks about clinical case finding based on not only risks but also signs and symptoms of IPV, and advocates the LIVES (Listen, Inquire, Validate, Enhance safety and Support) approach (WHO, 2019) to having safe, woman-centered discussions about IPV, rather than universal screening. Providing a safe, TVIC space for such discussions often leads to disclosures (Wathen, 2020), meaning that training in handling such disclosures is required for all providers who care for adolescent mothers.

Emphasizing Safety and Trust

Organizational level strategies

Creating a Welcoming and Safe Perinatal Environment. A significant finding of this study was the need for perinatal services, especially ANC, tailored specifically to the needs of adolescent mothers. In some cases, adolescent mothers reported being uncomfortable sharing the same waiting room with other mothers because they felt stigmatized by them and/or they did not want anyone to know that they were expecting a child. Perinatal nurses and midwives concurred that waiting areas are a space of potential risk for adolescent mothers. The key informants highlighted the need for a specific area where they could provide perinatal care to adolescent mothers, noting however the lack of available resources. Some strategies reported by nurses in this study included the use of separate entrance and exit doors and ways to maintain privacy, such as re-packaging or

masking take-home supplies or materials so they are not associated with pregnancy. Finally, instances of mistreatment were reported to include an array of onsite staff (e.g., cleaners and security guards); therefore, it is very important to provide TVIC education to all staff who may interact with adolescent mothers.

Ensuring Confidentiality in Perinatal Services. It is important to note that the ANC guidelines in Rwanda emphasize the importance of maintaining confidentiality when caring for adolescent mothers. Adolescent mothers, however, reported that they were subjected to the impact of disclosure of information about them by MCHWs, nurses, and midwives. Primary health care settings should elaborate on the policies regarding privacy and confidentiality with all providers and workers. Education and training should be offered to perinatal nurses and midwives on types of adolescent mothers' information that must be kept confidential. For example, a primary care setting should protect adolescent mothers' information by providing a space in which they can have a confidential discussion with healthcare providers out of sight of other staff and clients so they can be assured that their information will be kept confidential.

Seek Input from Adolescent Mothers on How to Create Safe and Inclusive Perinatal Services. In this study, adolescent mothers indicated they would like to participate in developing strategies to make perinatal services safe and inclusive. However, most key informants indicated that they do not have formal ways in which they so involve clients in service planning. Primary healthcare settings should provide mechanisms by which adolescent mothers could provide their input on their care, including regular surveys, suggestion boxes, and formal and informal feedback after service delivery.

Individual strategies (MCHWs, perinatal nurses, and midwives caring adolescent mothers)

Create Positive Relationships and Explain to Adolescent Mothers the Procedures and Expectations. In additional to a focus on non-judgmental and respectful interactions, as noted above, the TVIC principle specific to creating safety and trust focuses on relational practice, or as the ANC guideline highlights, creating rapport with and providing clear explanations to adolescent mothers among about their care. However, according to some adolescent mothers' narratives, perinatal nurses and midwives failed to do so. Organizational strategies to embed these duties and obligations among staff could include, for example, daily staff meetings, posters, emails and other reminders.

Create Opportunities for Adolescent Mothers to Have a Voice, Collaborate, and Connect

Organizational level strategies

Establishing Flexible Policies and Procedures. Across the findings, adolescent mothers face structural barriers related to policies and procedures that prevent them from accessing and utilizing the perinatal services they need. Two of the barriers consistently noted were the mandatory requirements that the mother present a community health insurance card and attend the first appointment with the father of the baby. There is a need to modify these policies to accommodate the contextual features of adolescent mothers' lives and experience. Whenever there is a new program to be implemented, as noted above, it is recommended to involve adolescent mothers in providing their insights.

Individual strategies (MCHWs, perinatal nurses, and midwives caring adolescent mothers)

Ensure Collaboration and Choice. Some adolescent mothers did not have the opportunity to discuss procedures with their nurses and midwives so they could make a decision about them, for example, some adolescents reported enforced reproductive health interventions related to post-partum family planning. Perinatal nurses and midwives should be educated about person-centered and shared decision-making and how to help adolescent mothers make informed decisions. Similarly, the care options offered must be safe, accessible and feasible. These types of options should be identified by the clinic and then discussed with adolescents receiving care to determine their needs, priorities and preferences. Furthermore, it is essential for an adolescent mother, whenever possible, to choose the gender of the healthcare provider since it has been found in this study that some adolescent mothers did not feel comfortable and safe being cared for by a male healthcare provider.

Ensure Strength-based Practices

Organizational level strategies

Tailoring Community Programs. The results of this study show that adolescent mothers face several challenges when accessing perinatal services, including a lack of transportation, especially those in rural and remote areas. Most adolescent mothers suggested they would regularly attend medical appointments if there were community clinics closer to home; a position reinforced by MCHWs. Some adolescent mothers suggested, when safe, intergenerational discussions should occur between healthcare providers, adolescent mothers, and their parents. By doing this, MCHWs may overcome

the challenges they face when visiting adolescent mothers because their parents refuse to let MCHWs into their homes or provide information.

Individual strategies (MCHWs, perinatal nurses, and midwives caring for adolescent mothers)

Help Adolescent Mothers Identify their Strengths. A few adolescent mothers in this study reported positive experiences with perinatal nurses and midwives, such as being calmed and letting them know that they could make it during labour and delivery. For example, some adolescent mothers reported being told by the perinatal nurses and midwives that they are strong women who can make it through labour and delivery. These strengths-based approaches that can help adolescent mothers access and utilize perinatal services, and finding and building on client strengths should be embedded into the design of the perinatal guidelines and the training of perinatal nurses and midwives.

Improving Care Interactions: Skills for Calming, Coping and Recognizing Triggers. The documents reviewed emphasize building positive relationships with adolescent mothers. However, some adolescent mothers reported being scolded by nurses and midwives. For instance, during episiotomy, one adolescent mother reported being slapped by a nurse/midwife because she could not open her legs for the procedure. This adolescent mother said she felt pain because the anesthesia did not work. The nurse/midwife gave up and called her colleague, who continued the same care. The adolescent mother added that the second one was very nice, conversant and calming her with more explanations of how everything works.

The findings from this study can be used to strengthen nursing and midwifery curriculum by incorporating TVIC principles in course syllabi, simulation labs, clinical objectives, and evaluation. Much work needs to be done to educate health professionals and others about trauma, violence, stigma and discrimination and their impacts on health and well-being. By educating pre-service learners on TVIC, potentially stigmatizing attitudes can be shifted, precipitating a change in practice (Wathen et al., 2021). In-service healthcare professionals should take equity-oriented care courses as part of their continuous professional development to renew their practice licenses.

Study Strengths and Limitations

This study has several strengths. In Rwanda, there is so much research conducted on adolescent pregnancies. However, to the best of our knowledge, this is the first study examining how perinatal services support teenage mothers to deliver trauma- and violence-informed care using an interpretive description. Second, to understand how perinatal services support adolescent mothers, this study used multiple data sources, including adolescent mothers, MCHWs, perinatal nurses and midwives, heads of health centers, community health officers, and documents review. Third, we employed young female research assistants (RAs) to conduct the interviews to ensure the adolescent mothers express themselves and their voices are heard. The researcher and RAs organized the debriefing sessions, reflexivity training, and exercises. Fourth, other researchers provided recommendations while our study generated a framework to integrate TVIC into perinatal services.

This study has some limitations. First, purposive sampling was employed to get the potential participants who were able and willing to share their experiences. This might leave behind some participants with different experiences. Second, this study used several data sources, including in-depth interviews, field notes and document review; however, it did not include observations. Third, this study was conducted in one province, which can prevent the generalization of data. Fourth, this study explored the practices of providers and due to the sensitivity of the topic, there was a possibility of social desirability bias. Therefore, researchers should also explore how healthcare professionals enact TVIC approaches to improve their practices in perinatal settings and other adolescent sexual and reproductive health. Future research should explore the effectiveness of providing equity-oriented care training to perinatal nurses and midwives in Rwanda, and elsewhere. This can be done by evaluating the impact of the education on adolescent mothers' outcomes (e.g., access and utilization of the services, quality of life, and mental health) and prevention of vicarious trauma among healthcare providers. Lastly, since the findings from this study revealed that parents play an important role in adolescent mothers accessing and utilizing perinatal services, there is a need to explore their impact when involved in intergenerational discussion.

Overall Conclusion

This study explored how perinatal services support adolescent mothers to inform trauma and violence-informed care in Rwandan primary healthcare settings. The findings revealed that adolescent mothers have positive and negative experiences accessing and utilizing perinatal services, where interpersonal and structural violence intersect to re-

create/activate trauma among adolescent mothers. Thus, a framework to improve care practices towards TVIC for adolescent mothers in perinatal services was developed, including exemplar strategies based on the data to shift practices and policies at system, organizational and individual levels. Findings from this study will be presented to different policymakers, including the Rwanda Ministry of Health and the regulatory bodies, to inform the development of policies and procedures tailored to adolescent mothers' needs and preferences. The results will also be presented to the Higher Learning Institutions in Rwanda to highlight the necessity of strengthening the existing curriculum by incorporating health equity approaches. The findings will also be presented in local, regional, and international seminars and conferences to inform other researchers about how perinatal services support adolescent mothers. Lastly, the manuscripts from this thesis will be published in international peer-reviewed journals.

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Appendix A: Ethical Approval-Western University

Western Research

Date: 16 November 2021

To: Dr Victoria Sunye

Project ID: 119846

Study Title: An exploration of the experiences of adolescent mothers accessing perinatal services in Rwanda to inform the delivery of trauma- and violence-informed care: An interpretive description

Application Type: HSREB Initial Application

Review Type: Delegated

Full Board Reporting Date: 07/December/2021

Date Approval Issued: 16/Nov/2021 19:17

REB Approval Expiry Date: 16/Nov/2022

Dear Dr Victoria Sunye

The Western University Health Science Research Ethics Board (HSREB) has reviewed and approved the above mentioned study as described in the WREM application form, as of the HSREB Initial Approval Date noted above. This research study is to be conducted by the investigator noted above. **All other required institutional approvals and mandated training must also be obtained prior to the conduct of the study.**

Documents Approved:

Document Name	Document Type	Document Date	Document Version
TVI Perinatal services for adolescent mothers Sep 28, 2021	Protocol	08/Sep/2021	1
TVI perinatal services for adolescent mothers data extraction sheet	Other Data Collection Instruments	21/Oct/2021	2
Interview guide for adolescent mothers	Interview Guide	21/Oct/2021	2
Interview guide for community health workers	Interview Guide	21/Oct/2021	2
Interview guide for Head of Health centers	Interview Guide	21/Oct/2021	2
Interview guide for nurses and midwives	Interview Guide	21/Oct/2021	2
Recruitment poster	Recruitment Materials	02/Nov/2021	3
Letter of information and informed consent HCPs	Written Consent/Assent	02/Nov/2021	3
Abaforomo n'ababyeza	Translated Documents	02/Nov/2021	3
Abajyanama b'ubuzima	Translated Documents	02/Nov/2021	3
abangavu	Translated Documents	02/Nov/2021	3
Abayobozi b'ibigo nderabuzima	Translated Documents	02/Nov/2021	3
Kda- Letter of information and consent- Adolescent mothers CLEAN	Translated Documents	02/Nov/2021	3
Kda- Letter of information and informed consent HCPs CLEAN	Translated Documents	02/Nov/2021	3
Kda- Recruitment poster	Translated Documents	02/Nov/2021	3
Letter of information and consent- Adolescent mothers	Written Consent/Assent	16/Nov/2021	4

Documents Acknowledged:

Document Name	Document Type	Document Date	Document Version
Translation certificate	Translation Certificate	02/Nov/2021	1

No deviations from, or changes to, the protocol or WREM application should be initiated without prior written approval of an appropriate amendment from Western HSREB , except when necessary to eliminate immediate hazard(s) to study participants or when the change(s) involves only administrative or logistical aspects of the trial.

REB members involved in the research project do not participate in the review, discussion or decision.

The Western University HSREB operates in compliance with, and is constituted in accordance with, the requirements of the TriCouncil Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2); the International Conference on Harmonisation Good Clinical Practice Consolidated Guideline (ICH GCP); Part C, Division 5 of the Food and Drug Regulations; Part 4 of the Natural Health Products Regulations; Part 3 of the Medical Devices Regulations and the provisions of the Ontario Personal Health Information Protection Act (PHIPA 2004) and its applicable regulations. The HSREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000940.

Please do not hesitate to contact us if you have any questions. Sincerely,

Ms. Nicola Geoghegan-Morphet , Ethics Officer on behalf of Dr. Emma Duerden, HSREB Vice-Chair

Note: This correspondence includes an electronic signature (validation and approval via an online system that is compliant with all regulations).

Appendix B: Ethical Approval-University of Rwanda

UNIVERSITY of RWANDA

COLLEGE OF MEDICINE AND HEALTH SCIENCES

DIRECTORATE OF RESEARCH & INNOVATION

CMHS INSTITUTIONAL REVIEW BOARD (IRB)

Kigali, 3rd/November/2021

NKURUNZIZA Aimable
School of Nursing and Midwifery, CMHS, UR

Approval Notice: No 330/CMHS IRB/2021

Your Project Title ***"An exploration of the experiences of adolescent mothers accessing perinatal services in Rwanda to inform the delivery of trauma- and violence-informed care: An interpretive description"*** has been evaluated by CMHS Institutional Review Board.

		Involved in the decision		
		Yes	No (Reason)	
Name of Members	**Institute**		**Absent**	**Withdrawn from the proceeding**
Prof Kato J. Njunwa	UR-CMHS	X		
Dr Stefan Jansen	UR-CMHS	X		
Dr Brenda Asiimwe-Kateera	UR-CMHS	X		
Prof Ntaganira Joseph	UR-CMHS	X		
Dr Tumusiime K. David	UR-CMHS	X		
Dr Kayonga N. Egide	UR-CMHS	X		
Mr Kanyoni Maurice	UR-CMHS		X	
Prof Munyanshongore Cyprien	UR-CMHS	X		
Mrs Ruzindana Landrine	Kicukiro district		X	
Dr Gishoma Darius	UR-CMHS	X		
Dr Donatilla Mukamana	UR-CMHS	X		
Prof Kyamanywa Patrick	UR-CMHS		X	
Prof Condo Umutesi Jeannine	UR-CMHS		X	
Dr Nyirazinyoye Laetitia	UR-CMHS	X		
Dr Nkeramihigo Emmanuel	UR-CMHS		X	
Sr Maliboli Marie Josee	CHUK	X		
Dr Mudenge Charles	Centre Psycho-Social	X		

After reviewing your protocol during the IRB meeting of where quorum was met and revisions made on the advice of the CMHS IRB submitted on 2nd November 2021, **Approval has been granted to your study.**

Please note that approval of the protocol and consent form is valid for **12 months**.

You are responsible for fulfilling the following requirements:

1. Changes, amendments, and addenda to the protocol or consent form must be submitted to the committee for review and approval, prior to activation of the changes.
2. Only approved consent forms are to be used in the enrolment of participants.
3. All consent forms signed by subjects should be retained on file. The IRB may conduct audits of all study records, and consent documentation may be part of such audits.
4. A continuing review application must be submitted to the IRB in a timely fashion and before expiry of this approval
5. Failure to submit a continuing review application will result in termination of the study
6. Notify the IRB committee once the study is finished

Sincerely,

Appendix C: Permission Letter

REPUBLIC OF RWANDA

Date 7/12/2021

Nº 4159/05.01

EASTERN PROVINCE
RWAMAGANA DISTRICT

Subject: Letter of Recommendation for Data Collection and Research Work

To Whom It May Concern

With reference to his letter of November 19, 2021, requesting permission to collect data in eight health centers, namely [redacted], this is to inform you that Mr. Aimable NKURUNZIZA is a Ph.D. Candidate at the University of Western Ontario, London, Canada. He is conducting a research entitled "An exploration of the experiences of adolescent mothers accessing perinatal services in Rwanda to inform the delivery of trauma- and violence-informed care: An interpretive description." He needs to collect data from adolescent mothers, nurses, midwives, community health workers (ASM), in charge of community health workers, and the head of health centers. Additionally, he will do the documents review from perinatal services.

Your cooperation will be highly ap[redacted]ciated.

Best Regards,

Appendix D: Recruitment Poster

An exploration of the experiences of adolescent mothers accessing perinatal services in Rwanda to inform the delivery of trauma- and violence-informed care: An interpretive description

Name of Principal Investigator: Dr. Victoria Smye, RN, Ph.D., Associate Professor & Director, Arthur Labatt Family School of Nursing, University of Western Ontario.

PARTICIPANTS NEEDED FOR RESEARCH ON ADOLESCENT MOTHERS EXPERIENCES IN PERINATAL SERVICES

We are looking for volunteers to participate in a study exploring the experiences of adolescent mothers in perinatal services of primary healthcare settings and experiences of nurses, midwives, and community health workers (CHWs) who provide care to adolescent mothers in Rwanda to inform the delivery of trauma- and violence-informed care. The participants need to meet the following criteria:

1. ***Inclusion criteria for adolescent mothers.*** a) attend perinatal services (Antenatal Care [ANC], Prevent Mother To Child Transmission [PMTCT], and maternity department), b) aged between 15-19 years, c) willing to share their experiences using perinatal services.
2. ***Inclusion criteria for Community Health Workers (CHWs).*** a) oversee maternal and child health- ASM (Animatrice de Santé Maternelle), b) have worked with adolescent mothers for at least one year in the community, c) willing to share their experience.
3. ***Inclusion criteria for nurses and midwives.*** a) nurses and midwives who work in perinatal services (PMTCT, ANC, and maternity) b) provided care at least one year in perinatal services, c) willing to share their experiences using perinatal services.
4. ***Inclusion criteria for key informants.*** a) Head of the health center or in charge of CHWs b) have been assuming this role for at least one-year b) willing to share their firsthand knowledge to oversee perinatal services or supervise CHWs.

If you are interested and agree to participate, you would be asked to: share your experiences when accessing the perinatal services as an adolescent mother or caring for adolescent mothers in perinatal services.

Your participation would involve only one interview session at the Rwamagana district near your health center, and each session will be about 60 minutes long. You may be compensated for your meal, time, communication and transportation."

For more information about this study or to volunteer for this study, please contact:

Aimable Nkurunziza, Co-investigator

Arthur Labatt Family School of Nursing, University of Western Ontario

Appendix E: Confidentiality Agreement- Research Assistants

Confidentiality Agreement

An exploration of the experiences of adolescent mothers accessing perinatal services in Rwanda to inform the delivery of trauma- and violence-informed care: An interpretive description

I, _____, the research assistant, have been hired to do data collection.

I agree to:

1. keep all the research information shared with me confidential by not discussing or sharing the research information in any form or format (e.g., records, transcripts, field notes) with anyone other than the *Researcher(s)*.

2. keep all research information in any form or format (e.g., records, transcripts, field notes) secure while it is in my possession.

3. return all research information in any form or format (e.g., records, transcripts, field notes) to the *Researcher(s)* when I have completed the research tasks.

4. after consulting with the *Researcher(s),* erase or destroy all research information in any form or format regarding this research project that is not returnable to the *Researcher(s)* (e.g., information stored on computer hard drive).

_____ _____ _____

(Print Name) (Signature) (Date)

Researcher

_____ _____ _____

(Print Name) (Signature) (Date)

Appendix F: Protocol for High Risk Interviews

Protocol for High Risk Interview

There are no foreseeable risks in participating in this study. However, some participants may experience emotional response and the following steps should be done:

1. Suspend the interview immediately
2. The research assistant with mental health skills will immediately assess if the client needs further management or resume the interview
3. If the research participant needs further management, we will take them to the mental health services at the health center.
4. With the participant's permission, the PI will follow-up with the participant via telephone or through community health workers within one week and after two weeks of the interview.
5. If the research participant states that they need additional support, the PI will assist in accessing mental health services

Appendix G: Letter of Information and Consent: Adolescent Mothers

Western
Arthur Labatt Family
School of Nursing

Letter of Information and Consent: Adolescent Mothers

Study Title: An exploration of the experiences of adolescent mothers accessing perinatal services in Rwanda to inform the delivery of trauma- and violence-informed care: An interpretive description

Name of the Principal Investigator: Dr. Victoria Smye, RN, Ph.D., Associate Professor & Director, Arthur Labatt Family School of Nursing, University of Western Ontario.

Co-Investigators

Aimable Nkurunziza, PhD Candidate, Arthur Labatt Family School of Nursing, University of Western Ontario

Dr. Nadine Wathen, Ph.D., Professor, Arthur Labatt Family School of Nursing, University of Western Ontario.

Dr. Panagiota Tryphonopoulos, RN, Ph.D., Assistant Professor, Arthur Labatt Family School of Nursing, University of Western Ontario.

Dr. Kimberley Jackson, RN, Ph.D., Assistant Professor, Arthur Labatt Family School of Nursing, University of Western Ontario.

Dr. David Cechetto, MSc., MEd., PhD, Professor Emeritus (active), Department of Anatomy and Cell Biology, Western University.

Dr. Darius Gishoma, RM, PhD, Senior Lecturer, School of Nursing and Midwifery, University of Rwanda.

In this consent document, "you" always refers to the study participant. If you are a substitute decision maker (SDM) (i.e. someone who makes the decision of participation on behalf of a participant), please remember that "you" refers to the study patient. If an SDM is needed for this study, you will be asked to review and sign this consent form on behalf of the participant.

Conflict of Interest

There is no expected conflict of interest related to this study.

Introduction

Teenage pregnancy continues to be a significant global public health problem. In Rwanda, the majority (75%) of adolescent pregnancies are related to sexual violence. Additionally, teen mothers face unique challenges such as stigma, rejection, and violence originating from their parents, peers, and the entire community, leading to poor mental health outcomes, including trauma. Due to trauma, teen mothers may experience challenges when using healthcare services, for example, when perinatal services fail to use trauma and violence informed approaches.

Purpose

This study aims to explore and describe adolescent mothers' experiences accessing perinatal services of primary healthcare settings in Rwanda and the experiences of providers who work in those settings to inform the implementation of trauma- and violence-informed care.

Study Design

This study is an interpretive description (ID) methodology. In-depth individual interviews will be conducted to explore experiences of adolescent mothers in perinatal services of primary healthcare settings and experiences of nurses, midwives, and community health workers (CHWs) who provide care to adolescent mothers. The heads of health centers and CHWs' supervisors will be interviewed to gain more insights into how perinatal services work in providing care to adolescent mothers. I also will review selected care protocols and guidelines in perinatal services from a trauma- and violence-informed perspective. You are invited into the study to discuss your experiences of working with adolescent mothers in perinatal services. It will take between 30- 60min to do this.

Procedures

During the interview, a private room will be used to ensure your privacy. The appointment will be obtained during your time off to avoid interfering with the work schedule. The interview guide will be composed of open-ended questions. The interview will be conducted in Kinyarwanda or English depending on your preferences, and you will be recorded. However, you have the right to request to stop the recording at any time during the interview. You also have the right to skip some questions if you feel uncomfortable, and there will be no adverse consequences. I will also be taking notes during the interview.

Voluntary Participation

You are free to volunteer or not, and if you do participate, you have the right to withdraw from the study anytime without any negative consequences. You also have the right to choose to be interviewed by a research assistant or by me. This decision will not affect you in any way.

Risks

There are no foreseeable risks in participating in this study.

Benefits

Your contribution will help to improve perinatal services for adolescent mothers.

Confidentiality

All the information that will be collected will be kept confidential. The transcribed notes will be kept on secured online storage in the Microsoft cloud called Western OneDrive. Your identities will not be associated with the data, i.e., you will choose a pseudo-name (code) to be used on demographic information. No one else will be aware of your participation in this study. Because we are collecting identifiable and sensitive information there is the risk of a privacy breach

Compensation

You will be compensated with 8,000 Rfw after the interview for a meal, transport, and accommodation.

Rights as a Participant

Your rights to participate in this study will be protected, such as the right to self-determination, privacy, confidentiality and anonymity, right to fair treatment, and right to protection from discomfort and harm.

Questions about the Study

If you require further information regarding this research and their participation, don't hesitate to contact me at the following email address and phone: cell phone: Or Aimable Nkurunziza: Email: Phone:

If you have any other questions regarding their rights to participate in this study, please feel free to contact one of the following contacts:

Western University Room Support Services Building, Western Road

London/Ontario, Canada,

Tel: RDS: Research Ethics:

Consent

You indicate your voluntary agreement to participate by signing the consent form below.

I appreciate your participation in this study, and thank you very much for considering my request.

Sincerely,

Consent form

Study title: An exploration of the experiences of adolescent mothers accessing perinatal services in Rwanda to inform the delivery of trauma- and violence-informed care: An interpretive

I have read and understood the provided information letter and have had the opportunity to ask questions. I voluntarily agree to take part in this study.

_____ _____ _____

Study Participant Signature Date (DD-MM-YYYY)

[please print]

My signature means that I authorize my child to participate in the study (if an adolescent mother is aged between 15-18 years).

_____ _____ _____

Legal guardian Signature Date (DD-MM-YYYY)

[please print]

My signature means that I have explained the study to the participant named above. I have answered all questions.

_____ _____ _____

Person Obtaining Consent Signature Date (DD-MM YYYY)

Appendix H: Letter of Information and Consent: Providers

Letter of Information and Consent: Providers

Study Title: An exploration of the experiences of adolescent mothers accessing perinatal services in Rwanda to inform the delivery of trauma- and violence-informed care: An interpretive

Name of Principal Investigator: Dr. Victoria Smye, RN, Ph.D., Associate Professor & Director, Arthur Labatt Family School of Nursing, University of Western Ontario.

Co-Investigators

Aimable Nkurunziza, PhD Candidate, Arthur Labatt Family School of Nursing, University of Western Ontario

Dr. Nadine Wathen, Ph.D., Professor, Arthur Labatt Family School of Nursing, University of Western Ontario.

Dr. Panagiota Tryphonopoulos, RN, Ph.D., Assistant Professor, Arthur Labatt Family School of Nursing, University of Western Ontario.

Dr. Kimberley Jackson, RN, Ph.D., Assistant Professor, Arthur Labatt Family School of Nursing, University of Western Ontario.

Dr. David Cechetto, MSc., MEd., PhD, Professor Emeritus (active), Department of Anatomy and Cell Biology, Western University.

Dr. Darius Gishoma, RM, PhD, Senior Lecturer, School of Nursing and Midwifery, University of Rwanda.

Conflict of Interest

There is no expected conflict of interest related to this study.

Introduction

Teenage pregnancy continues to be a significant global public health problem. In Rwanda, the majority (75%) of adolescent pregnancies are related to sexual violence. Additionally, teen mothers face unique challenges such as stigma, rejection, and violence originating from their parents, peers, and the entire community, leading to poor mental health outcomes, including trauma. Due to trauma, teen mothers may experience challenges when using healthcare services, for example, when perinatal services fail to use trauma and violence informed approaches.

Purpose

This study aims to explore and describe adolescent mothers' experiences accessing perinatal services of primary healthcare settings in Rwanda and the experiences of providers who work in those settings to inform the implementation of trauma- and violence-informed care.

Study Design

This study is an interpretive description (ID) methodology. In-depth individual interviews will be conducted to explore experiences of adolescent mothers in perinatal services of primary healthcare settings and experiences of nurses, midwives, and maternal community health workers (MCHWs) when providing care to adolescent mothers. The heads of health centers and MCHWs' supervisors will be interviewed to gain more insights into how perinatal services work in providing care to adolescent mothers. I also will review selected care protocols and guidelines in perinatal services from a trauma- and violence- informed perspective. You are invited to be in the study to discuss your experiences as an adolescent mother who accesses perinatal services. It will take between 30- 60min to do this.

Procedures

During the interview, a private room will be used to ensure your privacy. The appointment will be obtained in your time off to avoid interfering with the work schedule. The interview guide will be composed of open-ended questions. The interview will be conducted in Kinyarwanda or English depending on your preferences, and you will be recorded. However, you have the right to request to stop the recording at any time during the interview. You also have the right to skip some questions if you feel uncomfortable, and there will be no adverse consequences. I also will be taking notes during the interview.

Voluntary Participation

You are free to volunteer or not, and if you do participate, you have the right to withdraw from the study anytime without any negative consequences. You also have the right to choose to be interviewed by a research assistant or by me. This decision will not affect you in any way.

Risks

There are no foreseeable risks in participating in this study.

Benefits

Your contribution will help to improve perinatal services for adolescent mothers.

Confidentiality

All the information that will be collected will be kept confidential. The transcribed notes will be kept on secured online storage in the Microsoft cloud called Western OneDrive. Your identities will not be associated with the data, i.e., you will choose a pseudo-name (code) to be used on demographic information. No one else will be aware of your participation in this study.

Compensation

You will be compensated with 8,000 Rfw after the interview for a meal, transport, and accommodation.

Rights as a Participant

Your rights to participate in this study will be protected, such as the right to self-determination, privacy, confidentiality and anonymity, right to fair treatment, and right to protection from discomfort and harm.

Questions about the Study

If you require further information regarding this research and their participation, don't hesitate to contact me at the following email address and phone: cell phone: or Aimable Nkurunziza: Email: Phone:

If you have any other questions regarding their rights to participate in this study, please feel free to contact one of the following contacts:

Western University Room Support Services Building, Western Road

London/Ontario, Canada

Tel: RDS: /Research Ethics:

Consent

You indicate your voluntary agreement to participate by signing the consent form below.

I appreciate your participation in this study, and thank you very much for considering my request.

Sincerely,

Consent form

Study title: An exploration of the experiences of adolescent mothers accessing perinatal services in Rwanda to inform the delivery of trauma- and violence-informed care: An interpretive

I have read and understood the provided information letter and have had the opportunity to ask questions. I voluntarily agree to take part in this study.

_____	_____	_____
Study Participant	Signature	Date (DD-MM-YYYY)

[please print]

My signature means that I have explained the study to the participant named above. I have answered all questions.

_____	_____	_____
Person Obtaining Consent	Signature	Date (DD-MM-YY)

Appendix I: Interview Guide- Adolescent Mothers

The interview will last approximately 30-60 minutes. Interview will be audio-recorded. I assure you that your discussion will be confidential and no name or other socio-demographic data will be pronounced in this interview. I will use open ended questions and you will not be asked questions that you have previously answered. If you feel uncomfortable to answer a question, let me know I will skip it and there will be no negative impact on your participation. Please feel free to ask any question before we continue. Thank you very much.

Section 1: Socio-demographic data

1. How old are you? ----------
2. How many children do you have? ----------
3. At what age did you become a mother for the first time? ---------- For the second time? --------
4. Do you have other teen mothers in your immediate family? ----------
5. In which school year were you attending when you had the first pregnancy? For the second? ----------
6. Are you staying with your parents? ----------
7. Is this the same community you live in before and after getting pregnant? ----------

Section 2: Invitational questions

1. What interested you in this research?
2. Can you tell me about your experience of receiving perinatal services?
    a. What brings you to perinatal services?
    b. What are the highlights of perinatal services, i.e., those things that are most helpful to you?
    c. What are those things that have not been so helpful?
    d. What helped, what didn't? what were you expecting that you didn't get (and vice versa)?
    e. How are you made to feel comfortable and safe?
3. Tell me about your most positive experience in receiving care in perinatal services – what was it that made it so positive (or negative)?
4. What are your recommendations would you have to improve the care of adolescent mothers in perinatal services?
5. Is there anything else can you share with me that you think is important for this research to know how perinatal services/home visits are offered to adolescent mothers, that we did not cover in this discussion?

Appendix J: Interview Guide- Nurses and Midwives

The interview will last approximately 30-60 minutes. Interview will be audio-recorded. I assure you that your discussion will be confidential and no name or other socio-demographic data will be pronounced in this interview. I will use open ended questions and you will not be asked questions that you have previously answered. If you feel uncomfortable to answer a question, let me know I will skip it and there will be no negative impact on your participation. Please feel free to ask any question before we continue. Thank you very much.

Section 1: Socio-demographic data

1. Participant code: ----------
2. Primary healthcare setting: ----------
3. Age: ----------
4. Gender: ----------
5. Level of education: ----------
6. Working experience in perinatal services: ----------

Section 2: Invitational questions

1. Tell me what brought you to participate in this discussion today?
2. Tell me what brings adolescent mothers to your particular service – what do you provide? What are the unique features of care for adolescent mothers?
3. As you know, not all, but many adolescent mothers have experienced sexual violence. How do you ensure adolescent mothers experience safety and comfort in this setting? and/or
4. Tell me about the philosophy of care provision as it pertains to adolescent mothers and perinatal services.
5. What are the outcomes you hope for in working with adolescent mothers?
6. What are the highlights of your work with adolescent mothers?
7. What are the strengths related to care provision with adolescent mothers in this setting?
8. What are the challenges as you see them in providing care to adolescent mothers in this context?
9. Can you tell me about your overall experience caring for adolescent mothers in perinatal services? Perhaps you could provide a couple of examples of what care you have provided.
10. What was your educational preparation in the care of people who have a violence history? What do you see as your need in this regard?
11. What are your recommendations moving forward to improve the care of adolescent mothers in perinatal services?

12. Is there anything else can you share with me that you think is important for this research to know how perinatal services are offered to adolescent mothers, that we did not cover in this discussion?

Appendix K: Interview Guide- Maternal Community Health Workers (MCHWs)

The interview will last approximately 30-60 minutes. Interview will be audio-recorded. I assure you that your discussion will be confidential and no name or other socio-demographic data will be pronounced in this interview. I will use open ended questions and you will not be asked questions that you have previously answered. If you feel uncomfortable to answer a question, let me know I will skip it and there will be no negative impact on your participation. Please feel free to ask any question before we continue. Thank you very much.

Section 1: Socio-demographic data

1. Participant code: ----------
2. Community: ----------
3. Age: ----------
4. Level of education: ----------
5. Working experience in community: ----------

Section 2: Invitational questions

1. Tell me what brought you to participate in this discussion today?
2. Tell me what a home visit looks like with adolescent mothers. What are the unique features of care for adolescent mothers?
3. As you know, not all, but many adolescent mothers have experienced sexual violence. How do you ensure adolescent mothers experience safety and comfort in the home visit? and/or
4. Tell me about the philosophy of care provision as it pertains to adolescent mothers and home visiting within perinatal services.
5. What are the outcomes you hope for in working with adolescent mothers?
6. What are the highlights of your work with adolescent mothers?
7. What are the strengths related to care provision with adolescent mothers?
8. What are the challenges as you see them in providing home visits to adolescent mothers?
9. Can you tell me about your overall experience caring for adolescent mothers? Perhaps you could provide a couple of examples of what care you have provided. For example, can you tell me a story about caring for an adolescent mother in the home visit that you felt went well? and/or a story about caring for an adolescent

mother in the home visit that you felt did not go well? What did you do to handle the situation?

10. What was your educational preparation in the care of people who have a violence history? What do you see as your need in this regard?
11. What are your recommendations moving forward to improve the care of adolescent mothers in perinatal services?
12. Is there anything else can you share with me that you think is important for this research to know how home visits are offered to adolescent mothers, that we did not cover in this discussion?

Appendix L: Interview Guide- Key Informants (Head of health centers)

The interview will last approximately 30-60 minutes. Interview will be audio-recorded. I assure you that your discussion will be confidential and no name or other socio-demographic data will be pronounced in this interview. I will use open ended questions and you will not be asked questions that you have previously answered. If you feel uncomfortable to answer a question, let me know I will skip it and there will be no negative impact on your participation. Please feel free to ask any question before we continue. Thank you very much.

Section 1: Socio-demographic data

1. Participant code: ----------
2. Health center: ----------
3. Age: ----------
4. Gender: ----------
5. Level of education: ----------
6. Working experience as the head of health center: ----------

Section 2: Invitational questions

1. Can you tell me what interested you in my research study?
2. Tell me what it is like overseeing perinatal services as a head of health center?
3. Please share with me your experiences of how perinatal services are provided to adolescent mothers in this institution
4. How do perinatal services' practices, policies, and procedures include a focus on trauma and violence, and issues of safety and confidentiality for adolescent mothers in your institution?
5. In what ways do you offer support to nurses and midwives to provide the perinatal services to adolescent mothers?
6. What helps you in creating an environment supportive of nurses and midwives to provide perinatal services to adolescent mothers in this institution?
7. What do you see as barriers to you in creating an environment supportive of nurses and midwives to provide perinatal services to adolescent mothers in this institution?
8. In what ways do you involve clients, nurses, and midwives in identifying ways to implement perinatal services?
9. How do perinatal services' policies, practices, and procedures foster opportunities for choice and connection for adolescent mothers?
10. How are the perinatal services' policies, practices, and procedures tailored to adolescent mothers' needs, strengths, and contexts?
11. What do you think can be done to improve perinatal services of adolescent mothers in this institution?
12. Is there anything else can you share with me that you think is important for this research to know about the current organizational culture of health center/health

post and how it influences how perinatal services are offered to adolescent mothers, that we did not cover in this discussion?

Appendix M: Interview Guide- Key Informants (Community health officers)

The interview will last approximately 30-60 minutes. Interview will be audio-recorded. I assure you that your discussion will be confidential and no name or other socio-demographic data will be pronounced in this interview. I will use open ended questions and you will not be asked questions that you have previously answered. If you feel uncomfortable to answer a question, let me know I will skip it and there will be no negative impact on your participation. Please feel free to ask any question before we continue. Thank you very much.

Section 1: Socio-demographic data

1. Participant code: ----------
2. Health center: ----------
3. Age: ----------
4. Gender: ----------
5. Level of education: ----------
6. Working experience as a community health officer: ----------

Section 2: Invitational questions

1. Can you tell me what interested you in my research study?
2. Tell me what it is like supervising CHWs activities related to perinatal services?
3. Please share with me your experiences of how home visit is provided to adolescent mothers in the community by CHWs?
4. What helps you in creating an environment supportive of CHWs to do home visits to adolescent mothers in community?
5. What do you see as barriers to you in creating an environment supportive of CHWS to do home visits to adolescent mothers' community?
6. In what ways do you offer support to CHWs to provide the home visits to adolescent mothers in community?
7. What are the factors do you think facilitate CHWs to provide perinatal care in home visits to adolescent mothers?
8. What are the challenges CHWs face when providing perinatal care in home visits to adolescent mothers?
9. What do you think can be done to improve home visits of adolescent mothers in community?
10. Is there anything else can you share with me that you think is important for this research to know how home visits are offered to adolescent mothers, that we did not cover in this discussion?

Appendix N: Translation Certificate

LANGUAGE WITHOUT BORDERS LTD

KIGALI-RWANDA

CERTIFICATION

I, [redacted].I, hereby certify that to the best of my ability as a trained professional translator, I *translated* the following documents from English into Kinyarwanda in relation to the research entitled **"An exploration of the experiences of adolescent mothers accessing perinatal services in Rwanda to inform the delivery of trauma- and violence-informed care: An interpretive description".** The documents are as follows:

1. Socio-demographic questionnaire
2. Interview guides: adolescent mothers, community health workers (CHWs), CHWs' supervisors, Head of Health centers, and nurses and midwives
3. Letter of information and consent- Adolescent mothers
4. Letter of information and informed consent- Health care providers
5. Recruitment poster

The translation version in Kinyarwanda can be used for any purpose it is intended for as would the English version.

Appendix O: Data Extraction Sheet for Documents Review

Document name	Year of publication	Observations
National Antenatal Care (ANC) Guideline	2020 (112 pp)	- There is an emphasis on the quality of anti-natal care (ANC) for adolescent girls - Identify the role of Community Health Workers (CHWs) in the identification of pregnant adolescents in the community and encourages them to utilize ANC services - Recommend screening for intimate partner violence (IPV). - Involve the biological "father"; this is considered an essential good clinical practice - For the first ANC contact, a pregnant woman should receive HIV testing services together with the "partner" of the baby - Healthcare providers should directly involve the family members and "partners" on second-hand smoking counselling wherever possible - Early stimulation of the baby, encourage the pregnant woman to allow the "father" to touch her belly for massaging - Provide psychosocial support of women who are victims of Intimate Partner Violence (IPV) - Special considerations in management of the pregnant adolescent (a half page) • The document states that a special training is needed to work with adolescent mothers and the guide does not replace the training • Provide non-judgmental care • Encourage the asking of questions • Use clear and simple language • Ensure confidentiality • Understand the adolescent's difficulties in sexual related topics (fear of parental

		discovery, adult disapproval, and stigma) • Ask about where the adolescent lives (with family, couple, long-term relationship, subject to violence)-ongoing violence • Ask about who knows the status of the adolescent in terms of the pregnancy • Support the adolescent's concerns of puberty, stigma and violence, peer pressure, forming relationships - Screen for violence and abuse, sexual abuse, trauma or childhood maltreatment - Involve the "husband" in the management of hyperemesis gravidarum - Pregnant women and their "partners" should meet the maternal CHW - Encourage attendance at Community Platforms - Encourage attendance of pregnant women and adolescent girls and their male partners at the village roundtable program; this to support the utilization of anti-natal care
Home-Based Maternal and Child Care: Training Module for Community Maternal health Workers-Section 1 home based care of a pregnant woman	2010 (207 pp)	- The entire document does not talk about anything related to adolescent mothers; it talks about girls and pregnant women in general - In the skills and capacity portion related to CHW training, there is no information regarding how to manage ongoing violence in families against adolescent mothers - Case scenarios given in the training modules are only adult-focused - The responsibilities of the CHWs for the home visits are general not adolescent-oriented - The entire document uses the word "husband" - There are notes indicating the role of the husband's family

Appendix P: Curriculum Vitae

Education

- 2019-2023: PhD in Nursing, Arthur Labatt Family School of Nursing, Western University
- 2015-2017: Master of Science in Nursing, School of Nursing and Midwifery, University of Rwanda
- 2011-2013: Master of Public Health, School of Public Health, Mount Kenya University
- 2007-2010: Bachelor pf Science in Nursing, Faculty of Nursing, Kigali Health Institute

Employment

- Apr 2022- Present: Wraparound Student Support Provider, African Institute, Western University
- Nov 2022- May 2023: Research Assistant, Partnered Research Evaluating Services with Migrants in Agriculture (PRESMA) Project, Arthur Labatt Family School of Nursing, Western University
- Jan 2022-Apr 2023: Research Assistant, Equitable Maternal Newborn Care for Migrant Women, Arthur Labatt Family School of Nursing, Western University
- Apr 2022-March 2023: Research Assistant, REDI to Care: Reimagining Systems and Services that Engage Older Adults in Equitable, Diverse and Inclusive Care, Arthur Labatt Family School of Nursing, Western University
- Sept 2019-Aug 2023: Graduate Teaching Assistant, Arthur Labatt Family School of Nursing, Western University
- May 2018- Sep 2019: In-Country (Rwanda) Project Lead, Michigan University Eagle Research Center – Center of International Reproductive Health Training
- Nov 2017- Sep 2019: Pediatric Track Leader and Pediatric CPD Course Coordinator, University of Rwanda
- Oct 2017- Sep 2019: Assistant Lecturer, University of Rwanda
- 2016-2022: Part-time Lecturer, Ruli Higher Institute of Health Ste Rose De Lima (Rwanda)
- Jan 2015- Sep 2017: Tutorial Assistant, University of Rwanda
- Jul 2011-Dec 2014: Vice Principal in charge of Academics and Research, Byumba School of Nursing and Midwifery (Rwanda)

Professional Memberships and Licenses

- Current: Registered Nurse – College of Nurses of Ontario, 22486276
- 2012 – present: Registered Nurse, National Council of Nurses and Midwives, Rwanda, RN2092577

Continuing Education

- Winter 2023: Western Certificate in University Teaching and Learning (WCUTL), Western University: enhances the quality of teaching by graduate students and postdoctoral scholars and to prepare them for a future faculty or professional career
- Summer 2022: Equity, Diversity, Inclusion, Decolonization, and Indigeneity

(EDIDI) Certificate-Western University

Awards

- 2021-2022 Berman Family Graduate Award
- 2021 The *Irene E. Nordwich Foundation*
- *2021-2022* Ontario Graduate Scholarship (OGS)
- 2020 Best Panel Presentation for the Health Care & Health Management Panel on Africa-Western Collaborations Day
- 2019 Best poster presentation at Building Children's Nursing for Africa Conference, South Africa

Selected Peer-reviewed Publications

- **Nkurunziza, A.,** Moreland, P., Rosa, W.E., Uwimana, P., Katende, G., Umwangange, L., Rugema, J., Kayiranga, D., & Mukeshimana, M. Enhancing the education of pediatric nurses-a positive step towards achieving sustainable development goals: Discursive paper. (2023). *Nursing Open, 10*, 5017–5023. DOI: 10.1002/nop2.1816
- **Aimable Nkurunziza,** Nadja Van Endert, Justine Bagirisano, Jean Bosco Hitayezu, Olive Tengera, &Godfrey Katende (2023). Lessons learned from a Sexual and Reproductive Health Peer Education Program to Prevent Adolescent Pregnancies in High Schools in Rwanda. *African Journal of Reproductive Health, 27*, (4), 16-23. DOI: 10.29063/ajrh2023/v27i4.2
- **Nkurunziza A.,** Endert, N. Van, Bagirisano, J., Hitayezu, J. B.Dewaele, S., Tengera, O. Prevention of adolescent pregnancies in school adolescents: A collaborative approach (2023). *Rwanda Journal of Medicine and Health Sciences, 6* (1). https://doi.org/10.4314/rjmhs.v6i1.1
- Assumpta Yamuragiye, Jean Pierre Ndayisenga, **Aimable Nkurunziza,** Olive Bazirete, Marie Chantal Uwimana. Benefits of a Mentorship Program on Interprofessional Collaboration in Obstetric and Neonatal Care in Rwanda. A Qualitative Descriptive Case Study. *Rwanda Journal of Medicine and Health Sciences, 6* (1) https://dx.doi.org/10.4314/rjmhs.v6i1.9
- Emmanuel H.*, Nyishimirente S., Katende G., **Nkurunziza A,** Mukeshimana M., Ngerageze I., Mukashyaka J (2022). Factors Influencing Adherence to Antiretroviral Therapy among Adolescents Living with HIV in Rwanda**.** *Rwanda Journal of Medicine and Health Sciences*, 5 (3), 251-263. DOI: 10.4314/rjmhs.v5i3.1
- Ngerageze, I.*, Mukeshimana M., **Nkurunziza A.**, Bikorimana E., Uwishimye E., Mukamuhirwa D., Mbarushimana J., Bahaya F., Nyirasafari E., Mukabizimana J., Niyitegeka P., Mukandayisaba D., Tuyishimire M.L., Mukanoheli V. (2022). Knowledge and Utilization of Contraceptive Methods among Secondary School Female Adolescents in Rwamagana District, Rwanda. *Rwanda Journal of Medicine and Health Sciences, 5* (1), 71-84. https://doi.org/10.4314/rjmhs.v5i1.9
- **Nkurunziza, A.,** Chironda, G., Katenda, G., Rajeswaran, L., Munyaneza, E., & Mukeshimana, M., (2021). Medication interruptions and associated factors among nurses working in pediatric unit at a selected referral hospital in Rwanda. *Res. J. of Health Sci., 9*(4). doi.org/10.4314/rejhs.v9i4.1
- Mukangabire, P., Moreland, P., Kanazayire, C., Rutayisire, R., **Nkurunziza, A.,** Musengimana, D., & Kagabo, I. (2021). Prevalence and Factors Related to

Depression among Adolescents Living with HIV/AIDS, in Gasabo District, Rwanda. *Rwanda Journal of Medicine and Health Sciences, 4* (1). https://dx.doi.org/10.4314/rjmhs.v4i1.4

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- Umuhoza, A., **Nkurunziza**, A., Mukashema, J., Mukarugenga, M.C, Ndayisenga, J.P., & Rugema, J. (2021). Knowledge, attitude and practice towards hepatitis B virus prevention among nursing students at a selected campus in Rwanda. *Research Journal of Health sciences*, 9 (1).
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Selected conference presentations

- **Aimable Nkurunziza,** Victoria Smye, Nadine Wathen, David Cechetto, Panagiota Tryphonopoulos, Kimberley Jackson, & Darius Gishoma. An exploration of the experiences of adolescent mothers accessing perinatal services in Rwanda to inform the delivery of trauma- and violence-informed care: An interpretive description. The 33rd ICM Triennial Congress, which is being held in

Bali, Indonesia, 11 - 14 June 2023. (Theme: **Together again from evidence to reality).**

- **Aimable Nkurunziza**, Germaine Tuyisenge, Michael F. Habtu,Erigene Rutayisire, Van Endert Nadja, Jusine Bagirisano, Jean Bosco Henry Hitayezu, Jans Goele, Olive Tengera. Exploring the experiences of peer educators of the sexual and reproductive health peer education program in Kirehe District-Rwanda. Oral presentation at Center of International Reproductive Health Training (CIRHT) 2nd Conference in Kigali-Rwanda 5th-7th October, 2022. Theme (Sexual and Reproductive Health: Informing Policy and Practice through Research and Pre-Service Training).

Leadership

- Chairperson of Publicity, Logistics and Secretariat Committee and presented papers. 2nd International Nursing Conference in Kigali, Rwanda, (Theme ""Achievement of the Sustainable Development Goals for Better Health and Improved Quality of Life – Shifting Perspectives and Transforming Care")
- Coordinator of the National Pediatric Symposium, Kigali, Rwanda, 2017. (Theme: "Rwanda neonatal and Paediatric nurses: A quest for improved neonatal and paediatric outcome")

Knowledge Translation Activities

- Blog on The Centre for Research on Health Equity and Social Inclusion (CHRESI): Why we need trauma and violence informed care in maternal and child health care services: Findings from a new research from Rwanda and local implications. https://crhesi.uwo.ca/2023/02/22/why-we-need-trauma-and-violence-informed-maternal-and-child-health-services-new-research-from-rwanda-and-local-implications/ February 22, 2023
- The African Conversation Series Webinar-International Women's day: Need for Trauma & Violence-Informed MCH Services. http://www.events.westernu.ca/events/schulich-medicine-dentistry/2023-03/rwanda-need-for-trauma.html March 8, 2023

Community Engagement Activities

- Residency with the Center for Research on Health Equity and Social Inclusion (CRHESI)-Canada
- Member, interdisciplinary, collaborative initiative, the Centre for Research on Health Equity and Social Inclusion (CRHESI), which aims to bring communities together to collaboratively identify, research, understand, and address 'wicked problems' that prevent access to justice, health, and belonging for all people.
- Executive member of advisory board at African Institute, Western University
- Executive committee Member, Canada-Africa Young Scholars Coalition (CAYSC); the Coalition not only fosters and promotes collaborative, interdisciplinary scholarly approaches, but it also provides a platform for centering mentorship and academic support for young African and Africanist scholars.
- Volunteer, as a registered nurse, with Carrefour Communautaire Francophone de London (CCFL)- ethnocultural hub offering support and engagement in underrepresented communities.

Languages

- English – Fluent
- French – Fluent