

# Use of maternity services by adolescents in the Bandundu Urban-Rural Health Zone in the context of free care: Lived experiences, challenges, and perspectives of pregnant adolescents and adolescent mothers

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## ABSTRACT

### Introduction

In many developing countries, maternity care for adolescent girls is often inadequate, adversely affecting their health. In the Democratic Republic of the Congo (DRC), although access to maternity care has been studied, the specific experiences of adolescent girls with free maternity services remain underexplored. This study assesses adolescent girls' satisfaction with maternity services in the Bandundu Urban-Rural Health Zone. Maternal mortality in the DRC remains high, at 846 deaths per 100,000 live births, with poor care during pregnancy and childbirth being major contributors. Data on adolescent health needs and services remain limited.

### Purpose

The primary objective of this research is to evaluate the satisfaction levels of adolescent girls aged 16 to 19 with free maternity services in Bandundu, DRC. The study explores their lived experiences, challenges, and perspectives regarding these services, with particular attention to the quality of care received.

### Methods

A qualitative, descriptive, and exploratory approach was adopted. Semi-structured interviews were conducted with 18 adolescent girls aged 16 to 19 who had accessed maternity services in the Bandundu Health Zone. Thematic content analysis was performed using QDA Miner software. Donabedian's conceptual framework for assessing the quality of care guided the analysis, focusing on structural, process, and outcome aspects.

### Results

The findings revealed that the majority of participants expressed satisfaction with the maternity services received, particularly appreciating the quality of care, the environment, and the fact that services were free of charge. However, several issues were identified, including poor infrastructure (e.g., unsanitary toilets, inadequate equipment) and challenges in the care process (e.g., negligence, informal fees, verbal abuse, and long waiting times), which negatively impacted their overall experience. Despite these difficulties, most adolescents reported a generally positive experience and indicated a willingness to return and recommend the services to others.

### Conclusion

While the free maternity care policy in the Bandundu Health Zone is generally appreciated by adolescent mothers, several areas require improvement to enhance service delivery. These include infrastructural upgrades and better management of care processes to minimise negligence and eliminate informal fees. This study highlights the importance of refining the policy to retain its strengths while addressing identified weaknesses, thereby ensuring a more positive maternity care experience for adolescent girls.

## INTRODUCTION

Teenage pregnancies are a global concern due to their impact on individual health, socio-economic status, and overall development. Each year, approximately 16 million girls aged 15–19 give birth, while nearly 2 million give birth before age 15 in low-income countries (Shahabuddin et al., 2015; Tajvar et al., 2022).

In an era where global initiatives to reduce maternal mortality have intensified, it is crucial for governments in developing nations to consider the satisfaction of pregnant adolescents and adolescent mothers, along with its determinants (Srivastava et al., 2015). The effectiveness of medical services and their outcomes largely depend on the care process and the experiences of pregnant teenagers and teenage mothers. In many developing countries, the quality of maternity care provided to adolescents is often perceived as unsatisfactory. Thus, assessing adolescent girls' satisfaction with maternity care is an essential indicator of service quality (Panth & Kafle, 2018).

The number of teenage pregnancies is projected to increase globally by 2030, as the teenage population grows—especially in West and Central Africa, as well as Eastern and Southern Africa. Sub-Saharan Africa (SSA) is expected to experience the most significant rise, as it already holds the unfortunate record for early pregnancies and child marriages (Ahinkorah et al., 2021).

Teenage pregnancy prevalence in Africa remains alarmingly high. A recent systematic review found a prevalence of 18.8% in Africa, and 19.3% specifically in SSA (Malunga et al., 2023). Adolescent girls bear a disproportionate burden of sexual and reproductive health challenges, particularly in SSA (Phillips & Mbizvo, 2016). Frequent teenage pregnancies and their health and social consequences are pressing challenges in low- and middle-income countries (Yakubu & Salisu, 2018).

Globally, the average adolescent birth rate is 49 per 1,000 girls, with SSA leading at 120 per 1,000 girls (Worku & Woldesenbet, 2016). According to the World Health Organization (WHO), 16 million adolescent girls give birth annually, contributing to 23% of the global burden of disease related to childbirth (Duggan & Adejumo, 2012). Literature on early childbearing shows this group faces heightened vulnerability to both physical and

psychosocial issues, with long-term consequences. Inexperienced parenthood exposes adolescent girls to considerable medical and social risks (Duggan & Adejumo, 2012).

Adolescent motherhood can result in serious health consequences for both the mother and the infant (Erfina et al., 2019; Ganchimeg et al., 2014; Wang et al., 2022). The adolescent body may be biologically unprepared for childbirth, increasing the risk of life-threatening or disabling complications, particularly among those married and pregnant before age 18 (Erfina et al., 2019; Sedgh et al., 2015).

WHO data indicate that the average fertility rate among teenage girls aged 15–19 is 49 births per 1,000, with SSA reporting rates as high as 299 per 1,000 (Nkala-Dlamini, 2021; Schwingrouber et al., 2021; Shahabuddin et al., 2015). Teenage pregnancy significantly impacts maternal and infant mortality, and perpetuates cycles of poverty and ill health (Nkala-Dlamini, 2021; Shahabuddin et al., 2015).

Annually, an estimated 70,000 adolescent girls die from complications related to pregnancy and childbirth (Shahabuddin et al., 2015). Most maternal deaths are preventable. Evidence suggests that three to four out of every five maternal deaths could be averted through care provided by skilled health personnel before, during, and after delivery (Mpembele, 2020). However, in low-income countries, access to quality maternity care is limited by inadequate coverage, accessibility barriers, and underutilisation of services (Yesuf et al., 2014). One contributing factor is women's preference for certain health facilities, often shaped by their perception of care quality (Okonofua et al., 2017).

Studies show that maternal complications are more prevalent among adolescent mothers, with a 75% complication rate in girls under 15 and 47.8% in those aged 16–19. Fetal mortality was significantly higher among mothers aged 16–17 (Erfina et al., 2019). Teenage pregnancy complications are the second leading cause of death in this age group. There is increasing recognition of the need to offer tailored care to pregnant adolescents, particularly the youngest, due to their heightened vulnerability (Atekyereza & Mubiru, 2014; Ayuba & Gani, 2012). In SSA, some governments have adopted free

maternal health policies aimed at reducing complications and achieving Millennium Development Goal 5 (Twum et al., 2018).

However, these free maternal care policies face significant challenges, including drug shortages, funding deficits, a lack of qualified professionals, low engagement of key perinatal stakeholders, delayed reimbursements, staff overload, and demotivation (Gitobu et al., 2018; Xu et al., 2006).

Though such programmes have shown positive impacts on maternal health access and outcomes, a study across nine SSA countries (Ghana, Kenya, Nigeria, Burkina Faso, Burundi, Niger, Sierra Leone, Tanzania, and Uganda) reported that healthcare providers and managers view the quality of free maternal care as unsatisfactory (Ansu-Mensah et al., 2021).

In the Democratic Republic of Congo (DRC), prenatal services aimed at ensuring safe and free motherhood exist, but services specifically targeting pregnant adolescents remain lacking. The availability of free services alone does not guarantee their utilisation or improved outcomes. As a result, WHO recommends periodic assessment of women's satisfaction with delivery services as a tool for quality control and improvement of birth outcomes (Gitobu et al., 2018).

Service utilisation is influenced not just by affordability, but also by acceptability, which includes provider attitudes, behaviours, and perceived quality of care (Dalinjong et al., 2019). Quality of care, although often underestimated, remains central to policies promoting free maternal health services (van den Broek & Graham, 2009). It can be examined from both provider and user perspectives—specifically as observed and perceived quality (Baltussen et al., 2002; Hulton et al., 2007). Users play a pivotal role in assessing service quality, as their choices are shaped by personal and communal healthcare experiences. Understanding perceived quality can reveal strengths and weaknesses in obstetric care, guiding improvements to make services more user-centred (Karkee et al., 2014).

Data show that pregnant adolescents and adolescent mothers have poorer healthcare access and care-seeking

behaviours compared to older mothers, despite being at greater risk of complications and mortality (Namutebi et al., 2022). Consequently, it is essential to focus on adolescents during the perinatal period. Studies highlight that adolescents and their infants face significant risks due to inadequate preparation for motherhood, poor health information, and insufficient support (Masala-Chokwe & Ramukumba, 2017; Namutebi et al., 2022; Ronen et al., 2017).

The situation in the DRC underscores the need for multi-sectoral approaches to tackle teenage pregnancy. Understanding adolescents' perceptions of healthcare quality within clinical settings is vital for shaping effective policies and interventions (Malunga et al., 2023).

The Congolese government has prioritised maternal and child health by offering free care for pregnant women and children in selected public health facilities to improve access and equity. Nevertheless, comprehensive, adolescent-specific care remains limited.

Efforts to improve maternal health quality over the past two decades have increasingly considered user expectations and experiences. This study aims to explore the level of satisfaction of pregnant adolescents and adolescent mothers with prenatal care, delivery, and postpartum services in Bandundu Urban-Rural Health Zone.

Adolescent girls may be particularly sensitive to aspects of healthcare such as provider respect, competence, and the availability of essential resources (Berhan & Abeba, 2024). Cultural barriers, emotional neglect, and disrespectful or inhumane treatment may deter them from seeking obstetric care (Simbar et al., 2012).

Data on adolescent satisfaction with maternal services in the DRC remain limited. One 2017–2018 study reported that 80.4% of women were satisfied with prenatal care, despite concerns about reception, waiting times, and resources. Though not specific to adolescents, this study offers insight into prenatal service quality (Patrick, 2022).

Maternal mortality in the DRC remains alarmingly high, at 846 deaths per 100,000 live births, largely due to inadequate medical care during pregnancy and childbirth, and poor service quality. Data on adolescent health needs

are scarce, and service provision remains insufficient (Altare et al., 2020). The DRC is among the countries with the highest maternal mortality rates globally.

Over the past two decades, data on maternal mortality in the Democratic Republic of Congo (DRC) have shown considerable fluctuations. Between 2010 and 2015, the maternal mortality ratio (MMR) continued to vary without meeting the targets set under the Sustainable Development Goals (SDGs). In 2020, the MMR was estimated at 547 per 100,000 live births, with an uncertainty interval ranging from 377 to 907. Notably, estimates for the years 2000, 2005, 2010, and 2015 all fall within this range. The report highlights that, from 2000 to 2020, the average annual rate of reduction was a mere 1.2% (Mwene-Batu et al., 2024).

The DRC currently has one of the highest maternal mortality ratios globally. To meet its SDG commitments, the country must intensify its efforts sixfold by 2030 to significantly reduce this rate. Specifically, it needs to bring the MMR down from 473 to just 70 deaths per 100,000 live births (Maleya et al., 2019).

The DRC ranks fourth among the eight countries that together account for more than 50% of global maternal deaths, following India, Nigeria, and Pakistan. For instance, annual health reports from Maniema province indicate a fluctuating trend in maternal mortality: 294 deaths per 100,000 live births in 2017, declining to 170 in 2018, and then rising again to 282 in 2019. Despite these fluctuations, the observed reductions fell short of the national health policy targets. As a result, the government has reiterated that tackling maternal mortality remains a national health priority (Ramazani et al., 2022).

The country is also grappling with a high rate of teenage pregnancies. According to data from the Demographic and Health Survey (DHS), approximately one in four Congolese adolescent girls (24%) has begun childbearing, with nearly 19% having had at least one child and 5% currently pregnant for the first time. The proportion of adolescents who have initiated childbearing increases sharply with age, rising from 15% at age 15 to 47% at age 19; by this age, 42% of young women have already given birth (Luhete et al., 2017).

DHS findings also show improvements in access to prenatal care: the percentage of women without access to such care decreased from 20% in 2007 to 12% in 2014. However, maternal mortality remains alarmingly high, with the most recent estimates indicating 846 deaths per 100,000 live births, alongside a neonatal mortality rate of 28 per 1,000 live births (Maleya et al., 2019).

Although several studies in the DRC have examined adolescents' access to maternity care during pregnancy, childbirth, and the postnatal period, none has explicitly investigated the perceptions of pregnant adolescents and adolescent mothers regarding the quality of services offered in health facilities, or their satisfaction with care during the implementation of free maternity services.

This pioneering study addresses this gap by exploring, for the first time, the perceptions of pregnant teenagers and adolescent mothers regarding the quality of maternal health services provided in the Bandundu Urban-Rural Health Zone.

The aim is to inform policy-makers, programme planners, and healthcare providers through evidence-based recommendations to enhance adolescent maternal health outcomes in the DRC, with a specific focus on Bandundu. This is crucial in achieving the United Nations' target of reducing the maternal mortality ratio to fewer than 70 deaths per 100,000 live births by 2030, in line with the third Sustainable Development Goal.

Guided by this objective, the study seeks to answer three fundamental research questions:

1. What are the perceptions of pregnant adolescents and adolescent mothers regarding the quality of infrastructure for prenatal, perinatal, and postnatal services in the context of free maternity care?
2. What are their perceptions of the quality of service delivery and utilisation processes under free maternity care?
3. How do they perceive the outcomes of the care and services received during this period?

Accordingly, this study investigates the level of satisfaction among pregnant teenagers and adolescent mothers who have accessed maternity services in the

Bandundu Urban-Rural Health Zone. It explores their views on the structural components, processes, and outcomes of care received, all within the framework of the current free maternity policy.

Specifically, the study seeks to assess satisfaction and perceived quality related to:

1. The structure of prenatal, perinatal, and postnatal care services;
2. The processes of accessing and utilising these services; and
3. The outcomes resulting from service use and the care received by pregnant adolescents and adolescent mothers in the Bandundu Urban-Rural Health Zone.

## METHODS

### *Study Area*

This study was conducted in the Bandundu Urban-Rural Health Zone, an administrative entity of the Democratic Republic of Congo, located in Kwilu Province. The choice of this zone was motivated by its organisational and operational relevance to the specific objective of our study, as it encompasses both urban and rural areas. This implies that the zone must respond to the health needs of populations with diverse characteristics and challenges.

In addition, the selected facilities had a high number of adolescent beneficiaries of maternal care. The communities they served collectively represented different population groups, languages, and socio-economic classes. One of the selected facilities was a general referral hospital, as adolescent girls are at a higher risk of complications and are often referred there for improved care.

### *Study Design*

This study was qualitative, descriptive, and exploratory in nature. A phenomenological approach was adopted to describe and understand individual experiences based on the lived realities of the individuals interviewed.

### *Population and Sample*

The study focused on three categories of adolescent girls in three health facilities within the Bandundu Urban-Rural Health Zone: Bandundu General Referral Hospital (HGR), Bondeko Health Centre, and Malebo Health Centre. The participants included pregnant teenagers, adolescent

mothers who had recently given birth, and adolescent mothers who had previously given birth at the time of the study.

Participants were selected through purposive sampling. A total of 25 adolescent girls were initially contacted to participate in the study. However, based on the principle of data saturation, the final sample size was fixed at 18 participants—9 from Bondeko Health Centre, 6 from Malebo Health Centre, and 3 from Bandundu General Referral Hospital—as the information collected became redundant from the 15th participant onwards.

Inclusion criteria were as follows: aged between 13 and 19 years; ability to communicate effectively; access to services; receipt of pre-, peri-, or postnatal care at one of the study sites; fluency in Lingala, Kikongo, or French; and provision of written consent.

### *Data Collection, Processing, and Analysis*

Data were collected using semi-structured, face-to-face interviews guided by an interview protocol developed in alignment with the study's objectives, key research questions, and preliminary literature review. The guide addressed three core dimensions of the conceptual framework: structure, process, and outcomes.

A pre-test of the interview guide was conducted with three adolescents—each representing one of the service categories (prenatal, perinatal, postnatal)—from two non-participating health facilities, under conditions closely resembling those of the actual study. The aim was to assess the clarity, relevance, and comprehensibility of the questions. Feedback from the pre-test informed the refinement of the final version of the tool. Data coding was also compared with that done by two independent coders. Any discrepancies were reviewed and resolved through consensus.

To ensure the validity of the instrument, it was evaluated through the pre-test, reviewed by the research management team and field experts, and approved based on its alignment with the research objectives and themes. Their feedback enabled further refinement and final validation of the tool.

Interviews were conducted by the principal investigator in French, Kikongo, or Lingala. For pregnant adolescents and

those who had already given birth, interviews took place in a private room within the health facility at a time convenient for each participant and in their preferred language. Only the interviewer and the participant were present. For participants who had recently given birth, interviews were conducted at their homes. Each session lasted approximately 25 minutes.

In line with the principle of informed consent, all interviews were audio-recorded using a Dictaphone to avoid data loss. Prior to recording, participants were informed and gave their verbal consent. After each interview, the data were transcribed manually by the principal investigator to minimise transcription bias.

### Data Analysis

The audio recordings were translated into French and transcribed into a Microsoft Word 2016 document. The transcripts were then imported into QDA Miner software (version 5.0.19) for qualitative descriptive analysis. After cleaning the data, units of meaning were identified and analysed verbatim. The results were presented in narrative form. A coding key was developed to guide the classification of information and identification of informants.

Conceptual content analysis, also known as thematic content analysis, was the chosen method. It involved listening to the full recordings of participants' accounts, followed by a thematic analysis to extract major themes. Four specific types of analysis were conducted: two analytical (vertical and horizontal) and two synthetic (vertical and horizontal).

In the results section, verbatim quotes are referenced as follows: interview (INT), interviewee number (1-9), adolescent category (ADO-NOU-ACC), and health facility (e.g., Bondeko). Example: (INT-1-ADO-NOU-ACC-BONDEKO).

### Ethical Considerations

The study protocol received ethical approval from the Ethics Committee of the Institut Supérieur des Techniques Médicales de Kinshasa (No. 0047/CBE/ISTM/KIN/RDC/PMBBL/2024). Institutional approvals were also obtained from the health zone and health facility authorities.

All participants were informed freely and without coercion about the purpose and procedures of the study, and written informed consent was obtained. Participants were at liberty to pause or terminate their participation at any point, especially if they needed to attend to their children.

The study maintained strict confidentiality and anonymity, respecting human dignity and fairness throughout. The benefits of participation were clearly explained, including the contribution to advocacy for improved maternal health services for adolescent girls. Participants' identities were anonymised in all research documents. There were no known or anticipated risks to participants from either the researchers or healthcare providers.

All data and materials, including audio recordings, were stored securely and are to be destroyed in accordance with pre-established procedures. In the case of participants under 18 years of age, parental or guardian consent was also obtained. Participants were informed of and consented to the dissemination of study findings through publications and reports, which may include anonymised transcript excerpts.

## RESULTS

### Portrait of Study Participants

**Table 1:**  
Sociodemographic and economic characteristics of adolescent girls

Variables (n=18)	Frequency	Percentage (%)
<b>Age (in years)</b>		
16	3	16.7
17	4	22.2
18	2	11.1
19	9	50.0
<b>Level of Education</b>		
Primary	2	11.1
Secondary	2	11.1
Post-secondary	13	72.2
Tertiary	1	5.6
<b>Marital Status</b>		
Single	15	83.3
Married	3	16.7

Variables (n=18)	Frequency	Percentage (%)
<b>Income-Generating Occupation</b>		
Trader	10	55.6
Housewife	3	16.7
Seamstress	4	22.2
Others	1	5.5
<b>Family Income</b>		
Low	13	72.2
Medium	3	16.7
High	2	11.1
<b>Religion</b>		
Catholic	8	44.4
Kimbanguist	2	11.1
Protestant	5	27.8
Others	3	16.7

The data suggest that adolescent girls aged 16–17 are particularly vulnerable to early pregnancies and may be reluctant to seek maternal healthcare due to stigma and limited autonomy. While most have attained post-secondary education, those without secondary completion may face additional disadvantages. The majority are single, potentially heightening fears of social judgment associated with non-marital pregnancies. Low family income presents a significant barrier to healthcare access, compounded by low-paying occupations such as sewing and domestic work. Lastly, the predominantly Catholic context may influence decisions related to maternal healthcare.

**Table 2:**  
Obstetric Characteristics of Adolescents

Variables	Frequency	Percentage (%)
<b>Parity (n=18)</b>		
Nulliparous	6	33.3
Primiparous	10	55.6
Multiparous	2	11.1
<b>Number of ANC Visits (n=12)</b>		
< 4	6	50.0
4	4	33.3
> 4	2	16.7
<b>Mode of Delivery (n=12)</b>		
Vaginal delivery with intact perineum	8	66.7
Vaginal delivery with episiotomy	3	25.0
Caesarean section	1	8.3

Variables	Frequency	Percentage (%)
<b>Complications (n=12)</b>		
Yes	5	41.7
No	7	58.3
<b>Type of Complication (n=5)</b>		
Postpartum haemorrhage	2	40.0
Umbilical cord prolapse	1	20.0
Perinatal infection	1	20.0
Malpresentation	1	20.0

Primiparous adolescents, due to their inexperience, are especially vulnerable and require enhanced support to prevent complications. Furthermore, 50% of participants did not attend the recommended four antenatal care (ANC) visits, increasing the risk of adverse outcomes. Around 41.7% reported complications, with postpartum haemorrhage accounting for 40% of these cases. These findings highlight the urgent need to improve prenatal and perinatal care services and to strengthen surveillance and intervention mechanisms for postpartum haemorrhage.

## SATISFACTION WITH CARE RECEIVED BY PARTICIPANTS

The majority of adolescent girls expressed overall satisfaction with their maternity experience in the healthcare facilities studied. However, they also highlighted both positive and negative aspects related to the structure of the facilities, the care process, and the outcomes obtained, underlining the impact of these elements on their overall satisfaction. The findings reflect these dimensions as sources of either satisfaction or dissatisfaction.

### 1. Aspects That Satisfied the Majority of Adolescents

According to the theoretical framework, the elements that generated satisfaction among the majority of adolescents mainly concerned the structure of the facilities and the outcomes of care. Participants' feedback has been grouped under relevant themes and sub-themes.

#### A. Regarding Structure: Accessibility of the Healthcare Facility

This theme includes several dimensions of healthcare accessibility: geographical accessibility (proximity to healthcare facilities and availability of transport), financial

accessibility (affordability of care), the physical environment of the healthcare facilities, and the availability of human and material resources.

### 1. Proximity to the Health Facility and Means of Transport

The distance from home to the health centre greatly influences access to care. Participants who lived nearby could easily access services, often on foot. In contrast, those who lived further away faced significant transportation issues and high costs, such as the use of *wewa* motorcycles, or had to walk if financially constrained.

*“As far as health centre accessibility is concerned, I live nearby and walk there, which partly explains my choice to give birth there.”* (INT-3-ADO-ANACC-MAL, [personal communication](#))

*“As far as distance is concerned, I live relatively far from this health centre; I usually use my motorcycle to get there. However, if I have financial constraints, I go on foot.”* (INT-4-ADO-ENCE-BOND, [personal communication](#))

### 2. Service Costs

Adolescent girls appreciated that reproductive health services, such as antenatal consultations and maternity services, were free of charge, reducing their financial burden. However, access to medicines remained problematic: while some were free when available at the hospital pharmacy, others had to be purchased externally, incurring unplanned costs. Free antenatal consultation cards and laboratory tests helped reduce financial barriers, though some treatments still incurred charges.

*“As far as the costs of the various services are concerned, the prenatal consultation is free, as are maternity expenses. Prescription drugs are provided free of charge if they are available in the hospital pharmacy. However, if these drugs are not in stock, I am given a prescription so that I can acquire the missing products elsewhere.”* (INT-1-ADO-ENCE-HÔP, [personal communication](#))

### 3. Availability of Human and Material Resources

Doctors are primarily called upon to manage

specific or urgent cases, prompting participants to prefer hospital deliveries—particularly when complications are anticipated. This reflects the importance of rapid access to specialised care and the perception of a hierarchy between levels of care, influencing the choice of facility based on risk and perceived quality.

*“Within this hospital, doctors are available to intervene in the event of complications and can be consulted on request; however, their intervention is generally limited to deliveries with abnormalities.”* (INT-2-ADO-ENCE-HÔP, [personal communication](#))

*“[...] it is preferable to give birth in this facility; indeed, if a woman gives birth in a health centre and encounters complications during or after delivery, she will be transferred here to the referral hospital for optimal care.”* (INT-1-ADO-ENCE-HÔP, [personal communication](#))

### 4. Physical Environment

Participants generally expressed a positive perception of hygiene standards within healthcare facilities, with particular appreciation for the dedicated cleaning services. Respondents highlighted the cleanliness of the premises—especially the delivery room—emphasising the staff’s commitment to maintaining hygienic conditions after each procedure. This attention to hygiene boosted patient confidence and demonstrated an awareness of the need to maintain optimal health conditions.

*“In terms of hygiene within this health facility, I consider the centre to be clean overall, thanks to a housekeeping service dedicated to cleaning the premises.”* (INT-7-ADO-NOUACC-BOND, [personal communication](#))

*“In my opinion, this health centre has a high level of cleanliness. The delivery room was also spotless, as the staff systematically clean and maintain the premises after each obstetric procedure, aware that a new parturient may arrive at any time to give birth.”* (INT-8-ADO-NOUACC-BOND, [personal communication](#))

## B. Process-Related: The Course of Care

Seven dimensions of care influenced adolescent girls' satisfaction with the quality of services received: provider behaviour, therapeutic communication, respect for privacy, technical competence of healthcare professionals, length of consultation, psychological support, and the cost of services.

### 1. Provider Behaviour

Analysis of the testimonies reveals a generally positive patient experience regarding the welcome and care provided by nursing staff at the selected facilities. Most participants emphasised the kindness, respect, and cordiality of nurses and midwives during prenatal consultations, childbirth, and postnatal care. The staff's warm and caring attitude helped create a soothing environment. This positive interaction is viewed as essential for the emotional support of adolescent girls, enriching their experience of care in what is often an anxiety-inducing context.

*"I greatly appreciated the nursing staff's attitude towards me during the various interactions we had, as well as at the time of my delivery"* (INT-7-ADO-NOUACC-BOND, [personal communication](#)).

*"In short, in my personal experience, the nursing staff's attitude towards me was positive. I had an excellent relationship with all the medical staff at this health centre. In particular, the nurses and midwives were very kind to me"* (INT-1-ADO-ANCACC-MAL, [personal communication](#)).

*"As far as reception is concerned, I received excellent treatment from the nursing staff during my prenatal consultations, my delivery, and my postnatal consultations"* (INT-7-ADO-ANCACC-BOND, [personal communication](#)).

### 1. Therapeutic Communication

The testimonies of adolescent girls reveal clear and reassuring communication on essential topics such as breastfeeding, birth spacing, and health recommendations during pregnancy, including fetal movement monitoring and malaria prevention. They also appreciated the encouragement from staff to seek medical attention in case of discomfort, which reinforced their sense of safety. Additionally, they stressed

the importance of receiving detailed and transparent information about childbirth to reduce anxiety during this crucial stage.

*"The medical staff gave me sound advice on breastfeeding and birth spacing"* (INT-7-ADO-ANCACC-BOND, [personal communication](#)).

*"They gave me information about my health during pregnancy and advised me that, if I felt unwell, I should return to the centre without waiting for my scheduled appointment"* (INT-5-ADO-ENCE-BOND, [personal communication](#)).

*"Following the examination during my prenatal consultation, the midwife informed me about the health of my baby and myself. She also asked about fetal movements, which I confirmed were present. She then explained the importance of the recommended medications, particularly in preventing malaria, a harmful condition during pregnancy"* (INT-4-ADO-ENCE-BOND, [personal communication](#)).

However, some participants highlighted gaps in communication:

*"What's more, neither the midwives nor the nurses provided me with full explanations; they often simply asked me to lie down for an examination without clarifying their actions. Afterwards, they would hand me medications without explaining their significance. [...] After an examination, the midwife would just write notes in my consultation card without informing me about my pregnancy or the position of my baby"* (INT-1-ADO-ENCE-MAL, [personal communication](#)).

### 1. Respect for Teenagers' Privacy and Gender Preferences

Participants reported feeling protected due to strict protocols that limited access to consultation and delivery rooms to healthcare professionals only, ensuring an intimate and secure environment. Individual consultations further enhanced this sense of privacy. While some noted the presence of male staff, this did not significantly affect their overall satisfaction, as they felt their privacy was still respected.

*"My privacy was carefully preserved; it should also be noted that it is formally forbidden for anyone who is not a member of the nursing staff to access the consultation and delivery rooms in this centre"* (INT-3-ADO-ANCACC-MAL, [personal communication](#)).

"My privacy was scrupulously preserved during my interactions with the nursing staff, both during delivery and medical examinations" (INT-6-ADO-ANCACC-BOND, [personal communication](#)).

"[...] Moreover, during my delivery, a male member of staff actually directed the process. Although I felt slightly apprehensive about this, it was not of significant importance" (INT-7-ADO-ANCACC-BOND, [personal communication](#)).

### 1. Technical Competence of Care Providers

All participants expressed strong satisfaction with the technical competence of the healthcare providers. They cited rigorous monitoring during pregnancy, efficient management of deliveries, and fewer complications compared to other facilities. The participants voiced confidence in the nursing staff and noted the absence of complaints about the care received. This perceived competence significantly influenced their choice of healthcare facility.

"I rate the medical staff at this hospital as competent, as there are fewer complications observed during deliveries compared to other health facilities in the area" (INT-1-ADO-ENCE-HÔP, [personal communication](#)).

"I note that the staff at this health centre are highly qualified, having provided rigorous monitoring of my pregnancy and adequate direction during my delivery. Furthermore, I have never heard any woman express complaints about the quality of care provided by the medical staff at this centre" (INT-3-ADO-ANCACC-MAL, [personal communication](#)).

"I would describe the nursing staff at this health centre as exceptionally competent, having rigorously monitored the progress of my pregnancy and effectively directed my delivery. That's why I was able to give birth without complications or tears" (INT-4-ADO-NOUACC-BOND, [personal communication](#)).

#### - Length of Consultation

The duration of consultations varied depending on the number of patients and the nature of the issues presented. However, almost all participants felt that the duration was adequate. They appreciated that healthcare professionals took the necessary time for each interaction, fostering a climate of trust and support. This attention was essential for encouraging open communication, enabling teenagers

to express their concerns and receive advice tailored to their specific needs.

"Health care staff devoted sufficient time to each prenatal consultation without ever showing any rush" (INT-7-ADO-ANCACC-BOND, [personal communication](#)).

"In particular, the midwives devoted sufficient time to me during my consultations and did not show any eagerness during my visits" (INT-9-ADO-ENCE-BOND, [personal communication](#)).

#### - Psychological Support

The testimonies of most participants underlined the importance of emotional and psychological support during childbirth, especially for teenagers. The presence of loved ones or relatives, such as the mother or father, helped to alleviate fear and facilitated coping. Psychological support from medical staff—offering reassuring advice and encouragement—also played a key role. This family and professional support created an environment conducive to adolescents' well-being, facilitating a more positive and less anxiety-inducing childbirth experience.

"During my labour pains, I was surrounded by my mother, because fear was overwhelming me, being in ignorance of the events that might occur during this phase" (INT-1-ADO-NOUACC-BOND, [personal communication](#)).

"During labour, a nurse at my side advised me not to push until I felt the urge to exert efforts similar to those of defecation; another tried to reassure me by telling me not to be afraid" (INT-1-ADO-NOUACC-BOND, [personal communication](#)).

"A nurse congratulated me by announcing that I had given birth to a baby boy; she then placed the baby on my chest before cutting the umbilical cord" (INT-1-ADO-ANCACC-MAL, [personal communication](#)).

### C. Regarding the Results of Structure and Process Functioning within the Free Health Care Framework

Almost all participants expressed general satisfaction with the health facility, highlighting the quality of the environment, the staff, and the care received. Key elements influencing their satisfaction included the outcome of the pregnancy, the management of complications, and the absence of delivery-related costs. Adolescents particularly appreciated the care provided by

qualified staff. The financial aspect, especially the absence of fees, was also a major factor in their satisfaction. However, one participant noted that an unfavourable experience could have affected her overall perception of care.

*"In general, I am satisfied with the setting, staff, and care received, as I gave birth without complications, although I was predicted difficulties during delivery and there was a risk of referral to the general hospital for a possible caesarean section"* (INT-2-ADO-NOUACC-MAL, [personal communication](#)).

*"Overall, I am satisfied with the environment, the nursing staff, and the care received, as well as the costs associated with the various maternity services. In my experience, the medical staff working in this facility have an undeniable mastery of their field"* (INT-1-ADO-ENCE-HÔP, [personal communication](#)).

## 2. Aspects That Did Not Satisfy the Majority of Teenage Girls

### A. Concerning the Structure: Accessibility of the Health Facility

Adolescent girls expressed significant dissatisfaction with the cleanliness of toilets and showers, access to medical equipment and materials, the infrastructure, and the availability of medicines.

#### - Availability of Medical Equipment and Materials

Most adolescent girls indicated that, although the health facility provided adequate care for pregnant women and deliveries, it suffered from significant limitations regarding the necessary equipment and resources. They expressed concern about the lack of means of transport, such as ambulances, to evacuate patients in case of complications. Sometimes, families had to arrange transport themselves, which was perceived as both costly and dangerous for the health of mothers and newborns.

*"What's more, there is no ambulance service; in the event of an emergency, the patient's family must arrange transport to the designated hospital"* (INT-1-ADO-ENCE-MAL, [personal communication](#)).

The lack of essential equipment, such as an ultrasound machine, limited the services offered, making it impossible to satisfy even basic requests, such as determining the sex of the child. Although patients benefited from satisfactory pregnancy monitoring, these material shortcomings compromised optimal care.

*"As far as the equipment at this health centre is concerned, it's worth noting the absence of an ultrasound machine. For example, I would like to know the sex of my future child; nevertheless, it is regrettable that it is not possible to carry out an ultrasound scan on-site"* (INT-1-ADO-ENCE-MAL, [personal communication](#)).

*"[...] I would like to know the sex of my future child; nevertheless, it is regrettable that it is not possible to carry out an ultrasound scan in this health centre"* (INT-1-ADO-ENCE-MAL, [personal communication](#)).

#### - Infrastructure

Some teenagers expressed dissatisfaction with the comfort and infrastructure of healthcare facilities beyond the medical aspects. They reported issues with waiting rooms, which were considered too small and ill-equipped to handle the influx of patients, making waiting uncomfortable, especially in the heat. In addition, the quality of maternity beds and mattresses was criticised due to excessive heat and the presence of mosquitoes, both of which impacted patient comfort.

*"There is a waiting room that looks like a small room with a bed, but it's often insufficient to accommodate all the patients present. At times, the heat becomes oppressive due to the large number of people gathered there"* (INT-4-ADO-NOUACC-BOND, [personal communication](#)).

*"However, the waiting room is cramped and there are not enough chairs to accommodate pregnant women"* (INT-2-ADO-ENCE-HÔP, [personal communication](#)).

*"I'm not very comfortable with the condition of the maternity beds, especially the mattresses, which can sometimes be too hot. What's more, the presence of mosquitoes is an additional nuisance"* (INT-2-ADO-ENCE-HÔP, [personal communication](#)).

#### - Drug Availability

Despite the commitment to free maternity care, the majority of adolescent girls reported a shortage of essential medicines and supplies in health facilities. They described situations where essential medicines were unavailable, forcing them to seek alternatives, often under risky conditions.

1. *"What's more, sometimes certain prescribed medicines are not available in the health center pharmacy, forcing*

me to acquire them elsewhere" (INT-2-ADO-ENCE-HÔP, [personal communication](#)).

2. "Although we are assured that maternity care is free, some medicines are unfortunately not available in their pharmacy. On several occasions, we have been forced to go out at night to acquire the medicines we need in an emergency, despite the prevailing insecurity in the area" (INT-1-ADO-ENCE-MAL, [personal communication](#)).

#### - Cleanliness of Toilets and Showers

The majority of adolescents expressed dissatisfaction with the cleanliness of the healthcare facilities, particularly the toilets and the postpartum room. Former patients, who had given birth in the facility, were more critical than those in antenatal care. Testimonies revealed major concerns about the unsanitary state of toilets and showers, highlighting a lack of maintenance, unpleasant smells, and an alarming lack of cleanliness. The behavior of some users has also contributed to the deterioration of hygiene, exacerbating patients' discomfort and distress.

1. "Some patients don't respect the use of latrines; for example, some women who have given birth don't even flush after using the toilet. It's not uncommon to find blood or fecal matter scattered around the toilets" (INT-4-ADO-NOUACC-BOND).
2. "[...] the toilets were in an unsanitary state, and the state of the showers should not be mentioned. That's why I preferred to wash outdoors around 4 a.m., when darkness allowed, to avoid using these unhygienic facilities" (INT-2-ADO-ENCE-HÔP, [personal communication](#)).

#### B. Process-Related: The Care Process

Adolescent girls expressed dissatisfaction with several aspects of care, including unplanned informal charges, carelessness, inadequate communication, verbal abuse by some care providers, and long waiting times before being seen.

#### - Informal Costs (Unexpected Expenses)

Participants expressed concern about the cost of healthcare, particularly for maternity and certain procedures such as circumcision. They reported financial barriers, such as charges for essential medical supplies and medicines, as well as a lack of transparency in treatment provision, forcing them to find alternatives on their own.

1. "I went to the hospital to have my child circumcised by a nurse. I was then asked to pay 4,000 FC, supposedly for sterile gloves. As I didn't have the money, I was advised to come back the next morning if I could raise the required funds" (INT-1-ADO-ENCE-MAL, [personal communication](#)).
2. "I incurred an expense of 10,000 Congolese francs for the purchase of these pharmaceutical products; however, not all the medicines prescribed were supplied. As a result, I was forced to purchase some medicines from other sources" (INT-4-ADO-NOUACC-BOND, [personal communication](#)).
3. "Concerning the costs associated with the various maternity services and medicines, I was asked to pay 1,000 Congolese francs for the purchase of examination gloves, as well as for the cost of laboratory tests and the acquisition of medicines; nevertheless, I had not paid the costs associated with the delivery" (INT-8-ADO-NOUACC-BOND, [personal communication](#)).

#### - Neglect in Care

One participant reported negligence in the care of her child, particularly during a circumcision procedure carried out inappropriately by trainees. This generated anxiety and diminished trust in care providers. However, experienced nurses were quick to rectify the error, demonstrating much-appreciated vigilance and responsiveness.

1. "However, during my first delivery, the circumcision performed on my child was carried out inappropriately by the trainees. Fortunately, the nurses subsequently corrected this error" (INT-3-ADO-ANCACC-MAL, [personal communication](#)).

#### - Health Education

Some participants reported a lack of education on postpartum management and newborn care. They emphasized the absence of crucial information on preventing early pregnancy, as well as practical advice on aspects such as infant bathing and breastfeeding. This lack of support leaves teenage girls with important questions about childcare and family planning. These testimonies underline the need for comprehensive educational support to boost young mothers' confidence and ability to care for their babies.

1. "Finally, the nurses didn't explain to me how to avoid an imminent pregnancy after giving birth, even though this information seems essential to me. I would have liked advice on how to bathe my baby and on appropriate breastfeeding techniques" (INT-1-ADO-ANCACC-MAL, [personal communication](#)).

#### - Verbal Abuse by Healthcare Providers

Some participants reported verbal abuse during childbirth, highlighting negative experiences where they felt judged and unsupported by medical staff, particularly because of their early pregnancy. These testimonies reflect a sense of stigmatization, where the teenagers felt reprimanded rather than supported, exacerbating their anxiety. The derogatory comments underline the need for sensitivity and caring training for healthcare staff, particularly in the management of adolescent reproductive health.

1. "Before going to this health center, I had previously consulted another establishment where, unfortunately, the nursing staff were reprimanding towards me, insinuating that my early pregnancy revealed a lack of seriousness on my part" (INT-2-ADO-NOUACC-MAL, [personal communication](#)).
2. "As for the attitude of the nursing staff at this health center, I personally suffered the reproach of a midwife who questioned me about my pregnancy at my age, a remark I found unpleasant and disturbing" (INT-1-ADO-ENCE-MAL, [personal communication](#)).

Observations of older women revealed judgment or misunderstanding of teenage mothers' maternal choices, creating discomfort for the latter. This highlights the socio-cultural norms associated with motherhood and the weight of community expectations, which can influence young mothers' self-image and decisions.

3. "[...] some women who had given birth before me, who were older, murmured their incomprehension about my decision to give birth at that age, which caused me a certain unease" (INT-2-ADO-NOUACC-MAL, [personal communication](#)).

#### - Waiting Time Before Being Seen

Many teenage girls have expressed dissatisfaction with the opening hours of healthcare facilities, deeming the waiting time to be excessive before they are seen. Testimonies

revealed frustrations linked to frequent delays by medical staff, particularly midwives, which lengthen waiting times for consultations and obtaining medication. This wastes time and could deter young mothers from seeking regular care because of the inconvenience associated with these extended delays.

1. "It is imperative that the authorities in charge of this center take steps to remedy the delays experienced by healthcare staff during consultations. [...] When I go to the pharmacy to pick up medication, the waiting time before being served is considerable, resulting in a significant loss of time" (INT-2-ADO-ENCE-HÔP, [personal communication](#)).
2. "I sometimes arrive here at 8 am as planned; however, midwives usually start consultations around 10 am. In some situations, I have to go home and come back later, as I live close to the health center, to avoid wasting time" (INT-1-ADO-ENCE-MAL, [personal communication](#)).

#### - Subsequent Use of the Healthcare Facility

Despite concerns about the health facility's material conditions, the majority of teenagers said they would return to the same facility or recommend it to other women. The main reasons include the quality of care, the professionalism of the medical staff, and the attention paid to pregnancy monitoring, which gives this institution a trusted status for prenatal consultations and deliveries.

1. "Therefore, it is preferable to go directly to this hospital rather than waste time in small health centers" (INT-IDI-2-ENCE-HÔP, [personal communication](#)).
2. "I would unhesitatingly recommend this center to other women wishing to consult or give birth here, should they seek my advice, as this institution monitored my pregnancy carefully and conducted my delivery with exemplary professionalism" (INT-7-ADO-ANCACC-BOND, [personal communication](#)).
3. "I highly recommend my friends and other women to seek consultations at this health center, because, in my personal experience, the nursing staff here demonstrate a high degree of competence and kindness towards patients" (INT-1-ADO-ANCACC-MAL, [personal communication](#)).

## DISCUSSION

Service quality can be assessed based on healthcare facilities' compliance with established standards or patients' satisfaction with services, as expressed through their personal experiences. Although patient satisfaction is intrinsically subjective, it nevertheless provides relevant and in-depth feedback about their experiences within healthcare facilities (Chesumei et al., 2018). Satisfaction is often seen as a subjective and evolving perception of the adequacy between the care expected and that actually received (Senarath et al., 2006). Moreover, pregnant women's perception of the quality of care is a key indicator of service performance (Gishu et al., 2019; Steinhart et al., 2011).

The present study is based on the conceptual framework proposed by Donabedian for assessing the quality of care (Hibusu et al., 2024), with the aim of assessing adolescent women's satisfaction with maternity services provided as part of the free maternal healthcare policy within public facilities. It was carried out in two health centers and a general reference hospital located in the Urban-Rural Health Zone of Bandundu, in the Democratic Republic of Congo. Its main aim was to explore adolescent girls' experiences of maternal care and services.

Analysis of the data reveals that almost all the teenagers expressed general satisfaction with the services used, while highlighting essential elements such as the quality of care, the environment of the facility, and the absence of costs associated with childbirth. These findings are in line with those of a study carried out by Chesumei et al. (2018) in Kenya, where over 90% of participants reported a high level of satisfaction with maternity services, with the majority of deliveries taking place in public health facilities. Similarly, a study conducted in Ethiopia by Kidane et al. (2022) revealed an overall satisfaction rate of 80% among mothers with birthing services. Satisfaction with structure and processes was assessed at 62.3% and 81.3%, respectively.

Delivery procedures, respect for confidentiality, length of labor, waiting time, and fetal condition were found to be key factors in determining maternal satisfaction with delivery services. Our results also corroborate those observed in several developing countries, where a

significant proportion of mothers reported high satisfaction with free maternity services (Bulto et al., 2020; Getenet et al., 2018; Gitobu et al., 2018; Panth & Kafle, 2018; Tolossa et al., 2024). This may indicate that the services provided in these facilities were considered valuable, despite limited resources.

In contrast, the findings of the systematic review conducted by Ansu-Mensah et al. (2020) concerning the practice of free maternal healthcare revealed that the majority (61.5%) of included studies reported dissatisfaction among pregnant women with the quality of care provided (Dalinjong et al., 2017; Ganle et al., 2014; Koroma et al., 2017; Kuwawenaruwa et al., 2019; Ogbuabor & Onwujekwe, 2018; Owiti et al., 2018). The disparities observed could be attributed to variations in the research environment, the available health infrastructure, and the socio-demographic characteristics of the populations studied. This corroborates the hypothesis that the level of satisfaction differs from one country to another or from one study to another (Kruk et al., 2016; Mpembele, 2020; Tunçalp et al., 2015). This variation can be interpreted through the disparity in the quality of services offered in different countries, as well as within the same country, due to the methodological divergences observed in the studies, particularly with regard to the Likert scales employed and their interpretations. In addition, sampling plays a decisive role in determining women's expectations, which are influenced by their level of literacy and socio-economic status (Tunçalp et al., 2015).

Various factors can affect women's satisfaction with the maternity services they receive. These factors, corresponding to the multiple dimensions of these services, may vary according to the specific contexts of each country and can be analyzed using several models. They often show significant variability between different studies (Mpembele, 2020). Variations in satisfaction levels can also be explained by the location of interviews in different studies, which may or may not inhibit respondents (Mpembele, 2020). Another hypothesis that could shed light on this variation lies in the cultural differences present among populations in developing countries. This is particularly apparent in the case of Somali mothers, who express a lower degree of

satisfaction with the maternity services they receive in the United States than do American women. Furthermore, the World Health Organization defines quality care as care that is centered on the individual, i.e., care that takes into account their expectations, needs, and culture (WHO, 2016).

#### “Structural” Aspects of Care

The majority of participants indicated that the distance between their home and the health center was a determining factor in their choices regarding access to care. This issue is largely corroborated by existing literature, which highlights the importance of physical accessibility within healthcare systems. The study carried out by Mpembele (2020) revealed that almost all women lived close to the health facility they had chosen for their maternity care and expressed significant satisfaction with this. For many of them, this proximity was an essential criterion in their decision-making process. Indeed, these women felt a sense of security linked to this proximity, which enabled them to avoid any delay in their medical care, while also addressing concerns about general safety in their locality. Nevertheless, for some, this choice was primarily motivated by considerations of convenience. Similar results have been observed in several developing countries, as highlighted by Abredu et al. (2023).

The accessibility of a healthcare facility in terms of proximity is a determining factor in women's choices of access to maternity care. The results of this study, supported by current literature, underline the importance of increasing the physical accessibility of healthcare services to improve women's health, particularly for those living in remote or disadvantaged areas. The decision-making process regarding the choice of healthcare facility among pregnant adolescents is influenced by a variety of factors, including geographical proximity, reputation for quality of care, recommendations from family and friends, as well as previous experience and the need for medical interventions. A study by Chesumei et al. (2018) confirms this assertion, noting that three-quarters of participants chose their place of birth because of the maternity hospital's good reputation. It is therefore imperative that facilities strive to improve their brand image, provide reassurance about their medical practices, and create welcoming environments based on trust.

A major problem is the lack of ambulances to evacuate patients in case of complications. Research in Africa and Asia has revealed similar findings, including those by Banchani and Tenkorang (2014) and Essendi et al. (2015), who, in rural maternity hospitals in Kenya and Ghana, discovered that the unavailability of ambulance services obliges pregnant women to resort to inappropriate means of transport, such as commercial motorcycles and cabs, worsening their fragile state of health. Delays in access to emergency care, due to transport difficulties, can also result in additional costs for patients.

Studies, such as Dalinjong et al. (2018), show that women who are forced to seek their own transport often face financial and logistical obstacles that worsen their situation and that of their child. We argue that it is imperative to integrate medical transport as an essential component of the maternity care strategy to ensure the safety and well-being of pregnant women and their children.

The lack of transport facilities for referrals was also highlighted in the study carried out by Oyugi et al. (2024) and Ridde et al. (2012). On the other hand, Ridde et al. (2012) observed that Burkina Faso had integrated transport into its subsidy policy to optimize the transfer of mothers to health facilities. Thanks to a rapid and well-organized response to emergency and evacuation situations, mothers expressed a high level of satisfaction with the referral system introduced as part of the free maternity care policy. Participants reported unforeseen expenses, particularly for essential medical supplies, raising questions about the affordability of maternal healthcare in a free environment. The results of recent studies corroborate our observations. Qualitative research conducted in Morocco revealed that women and their families were forced to finance medicines and other supplies during childbirth in three public hospitals, despite the presence of a fee-exemption policy (Oyugi, 2021).

Another incentive for such expenditure is the prescription of essential drugs not on the official list provided by the health facility, which women should have access to. Other research carried out under a fee-exemption policy has reached conclusions similar to ours. For example, a study carried out by Masaba and Mmusi-Phetoe (2020) in the

slums of Nairobi revealed that some participants had to acquire medicines despite the promise of free access. This dimension has a negative impact on their perception.

The results of our research indicate that adolescent girls attach great importance to free access to various reproductive health services, such as prenatal consultations and maternity-related fees, which significantly alleviate their financial burden. Nevertheless, access to medicines proved to be a point of divergence.

These findings align with those obtained by [Ganaba et al. \(2016\)](#) in Burkina Faso, who had already highlighted that partial fee exemption was not effective in eliminating the childbirth costs it was supposed to remove. Similar results have been observed in previous studies concerning free maternity in several developing countries, including those conducted by [Asante et al. \(2007\)](#) and [Hangoma et al. \(2018\)](#), who found that the introduction of free healthcare policies failed to achieve their objective of preventing households from incurring expenditure on care in Ghana and Zambia.

Similarly, [Ilboudo and Siri \(2022\)](#) demonstrated through their research in Burkina Faso that the implementation of a free healthcare policy led to the elimination of charges for certain categories of the population while failing to alleviate the costs of childbirth for households as a whole. This policy appears to have significantly reduced the cost of childbirth for a considerable number of households, compared with the cost levels observed prior to its introduction. Furthermore, it appears to have eliminated delivery costs for half of all households using primary health center and district hospital services.

A significant number of participants reported high satisfaction with hygiene standards within the selected healthcare facilities, where the existence of a dedicated cleaning service was particularly valued. The literature underlines this finding, notably through a study conducted by [Srivastava et al. \(2015\)](#), which highlights that cleanliness is a determining factor in satisfaction in several countries, such as Gambia, Bangladesh, Iran, and India. In the same context, an efficient housekeeping service proves to be a significant predictor of the overall quality of care administered and contributes to creating an environment conducive to healing. It could also play a crucial role in

reducing the risk of nosocomial infections, a major concern in maternal healthcare.

Results diverging from our own were observed by [Mpembele \(2020\)](#) in Kinshasa, where the cleanliness of the facilities proved to be a factor of dissatisfaction in his study. The unsatisfactory quality of the cleaning service was also a negative aspect in the women's perception. The overwhelming majority of teenagers expressed dissatisfaction with the cleanliness of the toilets, showers, and postpartum living area. These findings align with those reported in the study by [Mpembele \(2020\)](#), where women expressed deep dissatisfaction with the lack of cleanliness of sanitary facilities. It is essential to note that this dissatisfaction with the cleanliness of sanitary facilities not only influences patients' experiences but could also have consequences for their health.

Findings opposite to our own were reported by [Panth and Kafle \(2018\)](#) in Nepal, where 74% of women were satisfied with the cleanliness of toilets. In a similar vein, [Lakew et al. \(2018\)](#) in Ethiopia found that 55.8% of women expressed satisfaction with toilet cleanliness. Participants also reported a high level of satisfaction with the cleanliness of the environment, reaching 93% in the study conducted by [Khumalo and Rwakaikara \(2020\)](#) at Bertha Gxowa District Hospital in South Africa.

Our results confirm the findings of several recent studies, notably that of [Mpembele \(2020\)](#), carried out in Kinshasa, which established that the availability of medical equipment as well as that of care providers were correlated with women's satisfaction with maternity care. These findings are also in line with those of a systematic review by [Srivastava et al. \(2015\)](#), which found that the availability of medical equipment was significantly related to satisfaction in Nigeria, Uganda, and Gambia.

We hypothesise that this discrepancy could be explained, on the one hand, by the low level of education in the samples, and on the other hand, by the conflicting cultural expectations specific to each country, or possibly by better maintenance of health infrastructures in these countries.

For some of the participants, expectations extended beyond medical equipment to include comfort linked to appropriate infrastructure. Adolescents expressed

dissatisfaction and concern about the quality of maternity beds. Similar findings have been reported in the literature, such as those observed by Oyugi et al. (2024), where mothers were forced to share beds due to overcrowding, potentially exposing them to unhygienic practices, which can lead to nosocomial infections in maternity wards and compromise quality of care. The study conducted in Kenya by Gitobu et al. (2018) revealed that investment in hospital infrastructure has not kept pace with the increase in the number of mothers using maternity services.

Adolescents reported that doctors were available to intervene in emergency cases, while nurses and midwives remained constantly available within health facilities. Similar results have been documented in recent literature, notably in the study by Gitobu et al. (2018), which found that mothers benefiting from free childbirth services expressed satisfaction with the availability of staff in delivery rooms and associated services. These findings corroborate those of Mpembele (2020), who indicated that a majority of women were satisfied with the accessibility of healthcare providers. Consequently, several studies included in the systematic review by Srivastava et al. (2015) emphasised that the availability of doctors and nurses, particularly in emergencies, is a decisive factor in users' choice of healthcare facilities. The presence of doctors and the availability of material resources greatly influence women's decisions regarding childbirth.

A significant proportion of adolescent girls expressed concerns about the accessibility of medical equipment and materials within the selected health facilities. Moreover, the availability of medical equipment has also been significantly correlated with satisfaction in countries such as Nigeria, Gambia, and Uganda (Srivastava et al., 2015). However, Mpembele (2020) reported that the majority of women were satisfied with the availability of medical equipment in their health facility. The lack of appropriate equipment for managing obstetric complications can have serious repercussions on the health of mothers and newborns.

Participants also highlighted the lack of essential medical equipment, notably ultrasound machines, in health facilities. Ultrasound is a fundamental tool not only for monitoring pregnancy but also for identifying potential

complications; its absence represents a major shortcoming that compromises the quality of care. Therefore, to improve the experience of adolescents and ensure optimal care, it is imperative to invest in the necessary equipment and resources within healthcare facilities.

Despite the commitment to free maternity care, a majority of participants reported that although essential medicines and supplies are available, they remain largely insufficient in these facilities. Similar findings reveal a shortage of essential medicines in health facilities, constituting a significant obstacle to optimal patient care. A recent study by Dalinjong et al. (2018) highlighted the shortage of medicines, including supplies such as gloves. Our findings align with those of several studies, including that of Onyeajam et al. (2018) in northern Nigeria, which established a link between drug availability and women's satisfaction with antenatal care.

Similarly, a study conducted by Getenet et al. (2018) in Ethiopia also found that access to medicines was correlated with patient satisfaction. This underscores the urgent need to improve the supply of medicines within healthcare facilities to avoid patients being forced to resort to potentially dangerous alternatives. On the other hand, some previous research on free maternity care, such as that by Ansu-Mensah et al. (2020), Gitobu et al. (2018), and Philibert et al. (2014), has shown that pregnant women report consistent availability of essential drugs and supplies in health facilities. To address these critical challenges, it is imperative that health infrastructures are properly equipped and adequately stocked with essential medicines.

#### *"Process" Aspects of Care*

All participants expressed a high level of satisfaction with the technical competence of the care providers. Their perceptions highlighted several positive elements, including rigorous monitoring during pregnancy, efficient management of deliveries, and a significant reduction in complications. These findings align with those of Mpembele (2020), who reported that nearly all participants in Kinshasa expressed satisfaction with the technical competence of care providers, evaluating this competence based on years of professional experience and problem-solving effectiveness. For many women, the perception of

providers' technical competence was a decisive criterion in their choice of healthcare facility. Similarly, [George et al. \(2023a\)](#) found that women were more satisfied with maternal health services when they perceived the technical quality of care to be "good" or when providers were deemed technically competent.

One participant reported a form of neglect in the care of her child. Comparable findings have been documented by [D'Ambruoso et al. \(2005\)](#), who revealed that perceived neglect in patient care, inappropriate management during labor, and errors in laboratory test results negatively impacted service satisfaction in Ghana. Neglect in childcare often leads to psychological consequences for families, including increased anxiety and diminished trust in care providers.

Testimonies from adolescent girls indicated that their experiences with caregivers' behavior were generally positive. The warm welcome, emotional support, respect, benevolence, and cordiality received from healthcare professionals positively influenced their satisfaction. These results are consistent with those of [Mpembele \(2020\)](#), where a majority of participants expressed satisfaction with providers' behavior, highlighting a warm welcome and respectful, dignified treatment throughout the services provided. Data on the interpersonal dimensions of care, considered fundamental determinants of maternal satisfaction, were collected from 22 studies in 18 countries. In these studies, respect, consideration, and courtesy in treatment were identified as key elements in ensuring maternal satisfaction ([George et al., 2023b](#); [Melese et al., 2014](#)).

In contrast, [Chikalipo et al. \(2018\)](#) found that healthcare providers often exhibited negative attitudes toward adolescent girls when providing reproductive health services. Hostile behavior from providers, particularly verbal aggression, could be attributed in part to excessive workload. Additionally, this attitude may stem from a lack of professional ethics, demotivation among medical staff due to inadequate remuneration, or insufficient professional skills ([Mpembele, 2020](#)).

Some adolescent girls reported feeling discriminated against by older women. Similar findings have been documented by [Bwalya et al. \(2018\)](#) in their study of

adolescent girls attending the Kanyama and Matero clinics in Lusaka District. Such interactions with older women in health facilities lead to feelings of discomfort, shame, and demotivation among adolescent girls to participate in subsequent antenatal care visits. It is reasonable to assume that such an environment may induce a sense of isolation in these young individuals, who may perceive their interpersonal relationships as less satisfactory. Comparable findings have also been reported by [Duggan and Adejumo \(2012\)](#) and [Mannava et al. \(2015\)](#), where adolescents described some maternity service providers as rude and disrespectful in their communication. These findings underscore the urgent need for targeted training for healthcare staff, focusing on empathetic communication and support for teenage mothers.

Respect for privacy was not a significant factor in the adolescents' perception of the quality of care. Almost all the teenagers interviewed expressed satisfaction in this regard, noting that rigorous protocols prohibiting access to consultation and delivery rooms by non-medical personnel helped establish an intimate and secure environment. Our findings are consistent with those of [Khumalo and Rwakaikara \(2020\)](#), who found that 84% of participants expressed high satisfaction with the preservation of their privacy by medical staff. However, although some adolescent girls expressed apprehension about the presence of men during the medical process, it is encouraging that this did not detract from their overall satisfaction.

Contrary to our findings, [Bohren et al. \(2015\)](#) highlighted a lack of privacy in delivery rooms during vaginal and abdominal examinations, due to the absence of curtains separating women from other patients. Moreover, preference for female maternity care providers has been identified as a major determinant affecting satisfaction with healthcare in developing country contexts, as indicated by [Mpembele \(2020\)](#) in Kinshasa. Similarly, research conducted in India by [George et al. \(2023b\)](#) revealed a marked preference for female practitioners. This trend may be explained by the greater comfort experienced by women when interacting with these professionals, as well as a heightened sense of intimacy. Additionally, women felt that female doctors were more

patient and better able to provide accurate answers during medical examinations.

Studies conducted in other African countries, such as Ethiopia and Eritrea, revealed that women expressed dissatisfaction with the level of privacy during labor (Kifle et al., 2017; Melese et al., 2014). The systematic review by Ishola et al. (2017) in Nigeria also highlighted the lack of privacy experienced by women in labor, often surrounded by several health workers and trainees. This lack of privacy is considered undignified and humiliating for adolescent girls. Taking into account the gender preferences of adolescent girls can significantly improve their experience and comfort during maternity care. It is therefore imperative that care providers are sensitized to this aspect to guarantee appropriate and respectful care for this vulnerable population.

Adolescent girls expressed satisfaction with the clear and reassuring therapeutic communication from the nursing staff. Recent research, such as that conducted by Abredu et al. (2023), has shown that therapeutic communication—including active listening, empathy, clarity, message tailoring, and emotional support—significantly influences mothers' satisfaction with care in Ghana, Lebanon, and Gambia. Furthermore, a previous study by Mekonnen et al. (2019) revealed that adolescent mothers encounter difficulties in therapeutic communication with care providers due to a lack of trust in the latter.

In our research, adolescent girls were found to be dissatisfied with health education, particularly in areas concerning the prevention of post-delivery teenage pregnancies and practical care such as bathing the newborn and breastfeeding techniques. Similar findings were observed in the study by Namutebi et al. (2022), where participants expressed an increased desire for more information on self-care, newborn care, family planning, and the appropriate time to return to the hospital during the postpartum period.

It should be noted that health professionals working in maternity wards under the free maternity care scheme are often overwhelmed by a high volume of patients, which limits their ability to provide mothers with the necessary advice in accordance with national guidelines.

Comparable observations were reported in a study addressing the unmet educational needs of pregnant women in sub-Saharan Africa. This study revealed that providers were not systematically offering women information about potential pregnancy complications during antenatal care, and that the information conveyed was often not delivered in a way that encouraged retention. For instance, more than 50% of the women surveyed stated that they had received no information at all during their antenatal visits (Chikalipo et al., 2018).

Conversely, differing results have emerged in recent literature. Notably, in the study conducted by Amu and Nyarko (2019), the participating women expressed satisfaction with the health education they received. Some even specifically mentioned particular themes within the health education sessions that had contributed to their satisfaction.

A study carried out in Oman also revealed that women's satisfaction was influenced not only by the content of the messages received but also by the mode of delivery—this included the provider's commitment, time availability, and ability to overcome language barriers (Ghobashi & Khandekar, 2008).

From a psychological perspective, adolescent girls expressed satisfaction with the emotional support provided by both family members and healthcare professionals. Our findings corroborate those in the literature, particularly the study by Namutebi et al. (2022), which emphasised the need for health workers to consider the psychological state of adolescent girls, who are often subject to stress and stigmatisation due to pregnancy.

Another study by Namutebi et al. (2022) demonstrated that teenagers who had the presence of a female support person during labour required less use of analgesics and reported a more positive birth experience. The support provided by a female companion, chosen by the adolescent during labour and delivery, had a significant positive impact on overall satisfaction with the maternal experience, as confirmed by studies conducted in Brazil and Malawi (Changole et al., 2010; Slomian et al., 2017).

The importance of psychological support has been clearly established in the literature. For example, Slomian et al.

(2017) found that emotional support—particularly from close relatives such as mothers and fathers—is crucial for adolescent girls during childbirth. We argue that the presence of family and friends, alongside active support from medical staff, are essential in reducing anxiety and promoting a more favourable birthing experience. It is therefore imperative that healthcare institutions adopt strategies aimed at integrating emotional and psychological support into care practices to ensure the well-being of teenage mothers.

The length of consultations was deemed appropriate by nearly all participants. This was closely associated with the number of patients attended to and the concerns raised by the teenagers with the doctors and midwives. Similar results were observed in previous studies, particularly the one by Mpembele (2020), which found that the duration of consultations was unanimously considered adequate by participants.

However, the first antenatal care (ANC) visit required significantly more time than subsequent visits due to the administrative procedures and medical examinations that women had to undergo. These requirements could potentially affect the daily income-generating activities of some participants. On the other hand, the study conducted by Masaba and Mmusi-Phetoe (2020) in Kenya reported a slight deterioration in waiting times in health facilities following the introduction of free maternity care, which could be attributed to the increased number of patients. The reduction in consultation time may also be linked to the demotivation observed among health professionals in Uganda and Niger after the removal of user fees for maternity-related services (Gitobu et al., 2018). The duration of consultations is a key factor influencing the quality of care. It is worth noting that healthcare institutions continue to promote practices that value a patient-centred approach to improve the maternity care experience.

A significant number of participants reported frustration with long waiting times and opening hours deemed unsuitable. Similar findings have been documented in recent literature, notably by Amu and Nyarko (2019), who reported that participants experienced unnecessary delays when collecting medication from hospital pharmacies.

Long waiting times before seeing a doctor were also a common source of dissatisfaction among respondents.

Waiting times not only influence satisfaction with services but also reflect broader concerns regarding service shortages, as highlighted in several studies. For instance, George et al. (2023a) noted that reducing waiting times is essential for improving the quality of services offered. On the other hand, findings from the study by Oyugi et al. (2024) suggest that the free maternity care policy is perceived positively despite longer waiting times—particularly during initial visits, when mothers benefit from additional ANC services not previously included under the former policy.

In contrast, a mixed-methods study conducted in Nigeria by Ajayi (2019) found that mothers expressed dissatisfaction with the waiting times resulting from the free policy, although these waiting times were not directly linked to any specific service. To address this issue, it is crucial for healthcare facilities to implement proactive strategies aimed at optimising time management and meeting the unique needs of adolescent girls.

#### *The “Outcome” Aspect of Maternal Care Satisfaction*

Pregnant women's satisfaction is critically important for their continued use of maternity care services at the same health facilities and their willingness to recommend these services to others (Hibusu et al., 2024).

Despite concerns about the material conditions of health care facilities, a majority of adolescent girls expressed a willingness to return to the same facility or recommend it to others. Similar findings were observed in several studies conducted in various countries. For example, Mpembele (2020) reported that most participants were willing to return to the facility or recommend it to others. Although participants expressed high levels of dissatisfaction, over 60% of respondents indicated they would choose to return to the hospital if they had another child. This may be explained by the belief that the birth of a healthy child is a sufficient reason to return or recommend the facility.

Comparable results were reported in Nepal, where 87% of women indicated a willingness to return to the same health facilities, and 94.9% were ready to recommend the

services to relatives (Panth & Kafle, 2018). Likewise, in health facilities in Lusaka District, Zambia, Hibusu et al. (2024) found that 89.0% of participants expressed a willingness to return. The study also noted that the majority of respondents were relatively young, aged between 20 and 24, suggesting that they may lack sufficient knowledge and experience regarding maternity care processes and expectations.

This underscores the importance of factors such as care quality, professionalism of healthcare staff, and attentiveness, in fostering trust in healthcare facilities. As such, healthcare providers should prioritise both technical quality and interpersonal relationships, as these contribute significantly to patient satisfaction and long-term service engagement (Hibusu et al., 2024).

Nevertheless, these positive outcomes may mask concerns related to social desirability bias, apprehension, or lack of alternatives within African contexts where access to healthcare is limited and provider-client relationships can be strained (Mpembele, 2020). These findings align with Donabedian's assertion that structural and procedural components often outweigh outcome measures in determining quality of care (Hibusu et al., 2024).

### Strengths and Limitations of the Study

This study enriches our understanding of adolescent maternal health in the Democratic Republic of Congo. However, it has notable limitations, particularly its exclusive focus on the perspectives of service beneficiaries, without including the views of healthcare providers. Self-reported satisfaction data from adolescents may be influenced by social desirability and inhibition, especially if responses were given in the presence of providers. Although most interviews were conducted in private, some participants were interviewed at home to minimise this bias.

The study, conducted in an urban-rural setting, included only adolescent girls from three public schools in urban areas, thereby excluding rural perspectives and potentially affecting representativeness. Additionally, satisfaction surveys may be influenced by cultural and social norms, making interpretation complex. The lack of data on previous birth locations and ethnic backgrounds of respondents may also limit the depth of analysis.

Despite these limitations, a major strength of the study lies in its provision of a platform for adolescent girls to freely express their views on free maternal healthcare services without external interference. However, findings cannot be generalised to broader contexts beyond the studied facilities.

### CONCLUSIONS AND RECOMMENDATIONS

This study aimed to assess adolescent girls' satisfaction with free maternity services in the Bandundu Urban-Rural Health Zone. Overall, participants reported positive experiences, citing favourable outcomes, skilled and respectful providers, and convenient facility locations. Nonetheless, issues such as unsanitary conditions, inadequate equipment, informal charges, and verbal abuse negatively impacted their satisfaction. Despite these challenges, participants remained willing to return and recommend the facilities.

The free maternity care programme is instrumental in expanding access to skilled maternal care for young mothers. However, to support universal health coverage and meet **Sustainable Development Goal 3.7**, which promotes access to high-quality sexual and reproductive health services, it is vital to address the programme's shortcomings while reinforcing its strengths.

Recommendations to enhance adolescent satisfaction and service utilisation include:

1. Equipping maternity units with adequate medical equipment, materials, and essential medicines.
2. Providing comfortable, hygienic infrastructures.
3. Regularly monitoring care quality using anonymous user satisfaction surveys.
4. Encouraging healthcare professionals to perform their duties diligently despite workload challenges.
5. Reducing waiting times, improving cleanliness, eliminating informal charges, preventing verbal abuse, and delivering adolescent-appropriate health education.

Finally, future research should examine adolescent access to maternity care from rural perspectives and include assessments of additional facilities outside the Bandundu urban-rural zone.

**Ethical Approval:** The study protocol received ethical approval from the Ethics Committee of the Institut Supérieur des Techniques Médicales de Kinshasa (No. 0047/CBE/ISTM/KIN/RDC/PMBBL/2024).

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