J. Pub. Health &Tox. Res., 2(2): 79-85 (2024) DOI: https://doi.org/0.60787/jphtr.vol2no2.36

LIVED EXPERIENCES OF UNMARRIED PREGNANT ADOLESCENT GIRLS ATTENDING PRIMARY HEALTH CARE IN PORT HARCOURT, RIVERS **STATE**

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Article History	Abstract
Received: 14 August 2024 Accepted: 02 September 2024 Published: 24 October 2024	Unmarried pregnant adolescent girls face unique challenges in accessing healthcare services and navigating social stigma. The study assessed the lived experiences of unmarried pregnant adolescent girls attending selected Primary Health Care in Port Harcourt, Rivers State. This qualitative study utilized a phenomenological approach to capture the subjective experiences of unmarried pregnant adolescent girls. Participants (15) were purposively selected from some primary healthcare facilities in Port Harcourt, Rivers State. Semi-structured interviews were conducted to gather rich narrative data on participants' experiences, perceptions, and challenges related to pregnancy and healthcare access. Interviews were audio-recorded, transcribed verbatim, and analyzed using ATLAS.ti software. Thematic analysis was employed to identify key themes and patterns within the data. The study revealed that 70% of the participants experienced stigma and discrimination from various sources, including family members, peers, and healthcare providers. The findings indicate that 76.7% of the participants faced challenges in receiving sufficient support from their family members and partners, encompassing financial, emotional, and practical assistance. The findings indicate that 73% of the participants encountered various obstacles, including financial constraints, transportation difficulties, long wait times at healthcare facilities, and perceived lack of confidentiality. Also, 96.6% of the participants experienced disrupted education due to their pregnancy, leading to limited opportunities for academic advancement and exacerbating feelings of insecurity and uncertainty about their future. Social stigma and discrimination, coupled with a lack of support from family members and partners, create significant barriers to accessing essential maternal healthcare services. Addressing these challenges requires coordinated efforts from all stakeholders to create supportive environments and dismantle systemic barriers.
	Keywords: Lived Experiences, Unmarried, Pregnant Adolescent Girls License: CC BY 4.0* Open Access article.

How to cite this paper: Uhuegbulem et al., 2024 Lived Experiences of Unmarried Pregnant Adolescent Girls Attending Primary Health Care in Port Harcourt, River State. Journal of Public Health and Toxicology Research, 2(2): 79-85.

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Introduction

The report held that pregnant adolescents face a range of challenges that can have negative impacts on their mental health and well-being: One of the main challenges being stigma, which can come from family members, peers, and healthcare providers. The scholars opined that pregnant adolescents may be judged and criticized for their pregnancy, which can lead to feelings of shame and isolation (Ganchimeg et al., 2014). Also, Social isolation Study Design: A qualitative interview-based study was observed as another common challenge faced by pregnant adolescents. Another study revealed that adolescent girls may feel disconnected from their peers and unable to participate in social activities due to their partners in South Saharan African Countries, was a significant challenge for pregnant adolescents. The subject of live experiences of pregnant adolescents has been reviewed in countries like the United States, Canada, Australia, and several European countries. For instance, Chandra-Mouli et al. (2013) examined the experiences of pregnant adolescents in low- and middleincome countries, including India, Kenya, and Zambia. The study found that pregnant adolescents in these countries face similar challenges to those in high-income countries, including stigma, social isolation, and lack of support from family and partners. However, other scholars opined that pregnant adolescent in low- and middle-income countries may face additional challenges related to poverty, lack of access to healthcare, and cultural norms around pregnancy and motherhood To calculate the sample size (n) for a population with a (Kassa et al., 2016).

In the Nigerian context, a study revealed that pregnant adolescents in Nigeria may face additional challenges related to poverty, lack of access to healthcare, and cultural norms around pregnancy and motherhood (Oche et al., 2013). The same study, examined the experiences of pregnant adolescents in a rural area of Nigeria and found that pregnant adolescents in this area faced significant challenges related to poverty, lack of education, and lack of access to healthcare. In addition, the authors held that, pregnant adolescent girls in this area were often stigmatized and faced discrimination from healthcare providers and community members (Lim et al., 2020). Researchers have identified several challenges that pregnant adolescents in Nigeria face in terms of stigma, social support, and access to healthcare (Koniak-Griffin et al., 2013; Karen et al., 2013). The present study assesses the lived experiences of unmarried pregnant adolescent girls attending selected Primary Health Care in Port Harcourt, Rivers State.

Methodology

Study Area: The study area in the research was the geographical location where the study was conducted

and where the participants are situated. In this case, the study area was Port Harcourt, Rivers State. Port Harcourt is the capital city of Rivers State in Nigeria. It is a major urban centre and a significant economic and cultural hub in the Niger Delta region. Port Harcourt is characterized by its diverse population and serves as the location where the primary health care facilities are situated, making it a key study area for this research (World Health Organization [WHO], 2019)

design. This involves conducting in-depth interviews with participants to gain a rich understanding of their experiences, perspectives, and challenges. Qualitative interviews allowed the researcher to delve deeply into the pregnancy. This, the authors opined, could lead to experiences and challenges faced by pregnant adolescent feelings of loneliness and depression (Chandra-Mouli et girls. It provided a platform for participants to express al., 2013). Similarly, lack of support from family and themselves in their own words, offering a comprehensive understanding of their unique circumstances.

> Study Population: The study focused on pregnant adolescents, typically aged between 10 and 19 years, who are residing in Port Harcourt, Rivers State, and who sought maternal healthcare services at primary health care facilities in the area. These adolescents were experiencing the unique life phase of adolescent pregnancy, which brought about a range of emotional, social, and healthcare-related challenges.

Sample Techniques and Sample Size:

The study employed the Purposeful Study method. In the study of the lived experiences and challenges of pregnant adolescent girls in selected Primary Health Centres (PHCs) in Port Harcourt City, purposeful sampling was a valuable method for participant selection.

Z-score of 1.96, an estimated proportion of the population of (0.25%) 0.0025, and a margin of error of 0.05, the formula for sample size for proportions was used. The formula is: to calculate the sample size (n) with a Z-score of 1.96, an estimated proportion of 2%, and a margin of error of 0.05, the formula for estimating sample size for a single proportion was used:

 $n = (Z^2 * p * (1-p)) / E^2$

Where:

- n is the required sample size.
- Z (Z-score) = 1.96 (for a 95% confidence level).
- p is the estimated proportion, which is (0.25%) 0.0025.
- E is the margin of error, which is 0.05.

To calculate the sample size (n) using the formula $n = \frac{Z^2 \cdot p \cdot (1-p)}{E^2}$, where: (6-40%) and age 18-19 (6-40%). The educational level

- Z-score = 1.96 (for a 95% confidence level)
- E (margin of error) = 0.05
- p (estimated proportion) = 0.0025

We can substitute these values into the formula:

$$n = \frac{1.96^2 \times 0.0025 \times (1 - 0.0025)}{0.05^2}$$

 $n \approx \frac{0.00960375}{0.0025}$

 $n \approx 15.4496$

Therefore, n is approximately 15 to the nearest whole number.

Data Collection: Semi-structured interview guides with open-ended questions were used as instruments. These guides were designed to encourage participants to share their personal experiences, challenges, and perceptions regarding adolescent pregnancy and maternal healthcare. The Researcher conducted one-on-one interviews with Lived Experiences of Unmarried Pregnant Adolescent Girls facilities. These interviews were typically audiorecorded to capture participants' responses verbatim.

Data Analysis: Interviews and discussions were transcribed into text format. Any field notes and document analysis findings were also prepared for analysis. The data were organized and indexed to facilitate easy retrieval during analysis. (Braun & Clarke, 2006). The data were coded, which involved attaching labels or codes to segments of text that represent themes, concepts, or ideas. Open coding was typically employed to create initial codes, and axial coding was used to connect and organize these codes into categories. The Researcher identified recurring themes and patterns within the coded data. Themes represent commonalities or significant issues that emerge from the experiences and challenges described by pregnant adolescent girls. Qualitative data analysis software, ATLAS.ti, was used to facilitate the organization, coding, and analysis of qualitative data.

Ethical Approval: The Researcher submitted a detailed research proposal that outlined the study's objectives, methods, participant recruitment, data collection, and data analysis processes. The proposal also included information on how ethical considerations will be addressed in respect to the informed consent, protection of participants, and privacy and confidentiality.

Results

Socio-Demographic Information of 15 Participants The socio-demographic profile of the participant presented in Table 1 indicated that the aged under 15 (3-20%), age 15-17

revealed that participant with no formal education (1-6.6%), Primary education (2-13.3%), secondary education (10-66.7%) and tertiary education (2-13.3%). The religion of the participants includes Christianity (13-86.7%) and Islam (2-13.3%).

Table 1: *Socio-Demographic Information of 15 Participants*

Variables	Frequency(N)=15	Percentage (%)				
Age of the Participants						
Under 15	3	20				
15-17	6	40				
18-19	6	40				
Educational Level of the Participants						
No formal	1	6.6				
education						
Primary	2	13.3				
education						
Secondary	10	66.7				
education						
Tertiary	2	13.3				
education						
Religion of the Participants						
Christianity	13	86.7				
Islam	2	13.3				

pregnant adolescent girls attending primary healthcare. The feedback from the semi-structured interview guided was presented in Table 2.

> Tables 2: Lived Experiences of Unmarried Pregnant Adolescent Girls

Variables	Comments	Number	Percentag
		S	e
			(%)
Social Stigma	Experienced	10	70%
and	stigma and		
Discriminatio	discrimination		
n	from family		
	members,		
	peers, and		
	healthcare		
	providers due		
	to their		
	adolescent		
	pregnancy		
	status, leading		
	to feelings of		
	shame and		
	isolation		
Lack of	Experienced	11	76.7%
Support	inadequate		
	support from		
	family		
	members and		
	partners,		
	including		
	financial,		
	emotional,		
	and practical		
	support,		
	which		

	exacerbated		
	their feelings		
	of		
	vulnerability		
	and stress		
Barriers to	Encountered	10	73%
Healthcare	various		
access	barriers to		
	accessing		
	maternal		
	healthcare		
	services,		
	including		
	financial		
	constraints,		
	transportation		
	difficulties,		
	long wait		
	times at		
	healthcare		
	facilities, and		
	perceived lack		
	of		
	confidentialit		
	y		
Educational	Experienced	14	96.6%
Disruption	disrupted		
	education,		
	limiting their		
	future		
	opportunities		
	and		
	exacerbating		
	feelings of		
	insecurity and		
	uncertainty.		

Social Stigma and Discrimination

Story 1: Sarah's Struggle

Sarah, a 16-year-old girl from Port Harcourt City, found herself pregnant unexpectedly. As she navigated the challenges of adolescence, Sarah faced judgment and stigma from her family, peers, and even healthcare providers. When she visited the primary health care (PHC) centre for prenatal check-ups, she felt the weight of disapproving glances and whispered conversations among the staff.

Her family, initially shocked by the news of her pregnancy, reacted with disappointment and shame. Sarah's parents, fearing societal judgment, urged her to keep her pregnancy hidden from relatives and neighbours. They worried about their reputation in the community and pressured Sarah to consider options like abortion or adoption.

At school, Sarah's once supportive friends distanced themselves from her, spreading rumours and gossip about her pregnancy. She felt isolated and alone, longing for acceptance and understanding. Even teachers, whom she once trusted, treated her differently, assuming she would drop out of school and never fulfil her potential.

Despite facing discrimination at every turn, Sarah remained determined to seek prenatal care and support for herself and of the stigma attached to her pregnancy. The healthcare

providers, though professional in their duties, seemed indifferent to her emotional needs, focusing solely on her physical well-being.

Despite the challenges, Sarah found solace in the companionship of other pregnant teenagers at the PHC centre. They shared similar experiences of stigma and discrimination, forming a bond of solidarity and support. Together, they found strength in their shared struggles, offering each other comfort and encouragement in the face of adversity.

Lack of Support

Story 2: Fatima's Struggle

Fatima, a 16-year-old girl from Port Harcourt City, found herself pregnant after a fleeting relationship with her boyfriend. Overwhelmed by fear and uncertainty, Fatima turned to her family for support, hoping they would help her through this challenging time. However, instead of receiving the comfort and assistance she desperately needed, Fatima encountered neglect and abandonment.

When Fatima informed her parents about her pregnancy, they reacted with shock and disappointment, refusing to acknowledge her situation or offer any form of assistance. Feeling abandoned and alone, Fatima struggled to cope with the emotional and financial strain of teenage pregnancy. Without the support of her family or partner, she faced increasing stress and anxiety, unsure of how she would navigate the road ahead.

As her pregnancy progressed, Fatima encountered numerous obstacles and challenges, exacerbating her feelings of vulnerability and despair. Without access to prenatal care or emotional support, she felt isolated and overwhelmed by the weight of her situation. Despite her efforts to seek help, Fatima found herself struggling to cope with the demands of motherhood, longing for the support and understanding she so desperately needed.

Barriers to Healthcare Access

Story 3: Amarachi's Struggle

Amarachi, a 17-year-old girl from Port Harcourt City, was overjoyed when she learned she was pregnant. However, her excitement soon turned to anxiety as she realized the challenges she would face in accessing maternal healthcare services. Living in a low-income neighbourhood with her single mother, Amarachi knew that financial constraints would be a significant barrier to receiving prenatal care.

With her family struggling to make ends meet, Amarachi had little money to spare for medical expenses. The cost of transportation to the primary healthcare centre was already a burden, and the additional expenses associated with prenatal appointments and tests seemed insurmountable. Despite her best efforts to save money and seek assistance from local charities, Amarachi found herself unable to afford the care she needed to ensure a healthy pregnancy.

Transportation difficulties further complicated Amarachi's situation, as she lived in a remote area of Port Harcourt City with limited access to public transportation. The nearest primary healthcare centre was several miles away, and the unreliable bus service made it challenging for Amarachi to travel there for her prenatal appointments. Often, she would spend hours waiting at the bus stop, only to miss her appointment due to delays or overcrowded buses.

Even when Amarachi managed to overcome financial and her unborn child. Each visit to the PHC centre was a reminder transportation barriers, she encountered long wait times at the healthcare facility that tested her patience. Overcrowded

waiting rooms and understaffed clinics meant that Amarachi immediate social circles. Family members, who are often spent hours sitting uncomfortably on hard plastic chairs, waiting for her turn to see a healthcare provider. The lengthy delays made her feel frustrated and discouraged, wondering if seeking prenatal care was worth the effort.

Moreover, Amarachi perceived a lack of confidentiality at the healthcare facility, fearing that her privacy would be compromised if she sought prenatal care. Concerned about the judgment and stigma she might face from healthcare providers and other patients; Amarachi hesitated to disclose her pregnancy or seek assistance for fear of being treated poorly. This perceived lack of confidentiality further deterred Amarachi from accessing maternal healthcare services, leaving her feeling vulnerable and isolated.

Despite facing numerous obstacles, Amarachi remained determined to prioritize her health and the health of her baby. With support from a local community organization that provided transportation assistance and advocacy services, Amarachi was eventually able to overcome some of the barriers she faced and access the prenatal care she needed. However, her journey highlighted the systemic challenges and inequalities that continue to hinder access to maternal healthcare services for pregnant adolescents in Port Harcourt City.

Educational Disruption

Story 1: Chioma's Dilemma

Chioma, a bright 16-year-old girl from Port Harcourt City, had always dreamed of becoming a nurse. She excelled in school, earning top grades and impressing her teachers with dedication and intelligence. However, Chioma's aspirations were put on hold when she discovered she was

Faced with the reality of her situation, Chioma struggled to balance her education with the demands of pregnancy. As her belly grew larger, attending school became increasingly challenging. Chioma's teachers and classmates noticed her absence from classes and began to whisper behind her back, speculating about her sudden disappearance.

Despite her best efforts to keep up with her studies, Chioma found herself falling behind. The physical and emotional toll of pregnancy took its toll on her concentration and motivation, making it difficult for her to focus in class. As her due date approached, Chioma made the difficult decision to temporarily drop out of school, knowing that she would struggle to keep up with her coursework while caring for her newborn baby.

Chioma's dreams of becoming a nurse seemed further out of reach as she grappled with the uncertainty of her future. Without a high school diploma, Chioma feared that she would never be able to pursue her passion for nursing or secure a stable job to support herself and her child. The disruption to her education left Chioma feeling insecure and overwhelmed, unsure of how to navigate the challenges ahead.

Discussion

expected to provide support and understanding during times of need, often react negatively to adolescent pregnancy due to cultural norms, expectations, and fears about the consequences of early motherhood. Studies have shown that family rejection and ostracism can have profound psychological effects on pregnant adolescents, leading to feelings of shame, guilt, and low self-esteem (Sipsma et al., 2010). Also, research has demonstrated that peer-related stigma can contribute to poor mental health outcomes and hinder adolescents' ability to cope with the challenges of pregnancy (East et al., 2019).

The findings indicate that 76.7% of the participants faced challenges in receiving sufficient support from their family members and partners, encompassing financial, emotional, and practical assistance. This lack of support exacerbates feelings of vulnerability and stress among pregnant adolescents, highlighting the need for comprehensive interventions to address their needs effectively. Financial support is a crucial aspect of ensuring the well-being of pregnant adolescents, as they often lack the resources necessary to meet their basic needs and cover the expenses associated with pregnancy and childbirth. Studies have shown that financial instability and poverty are significant risk factors for adverse maternal and neonatal outcomes among adolescent mothers, including low birth weight, preterm birth, and inadequate prenatal care utilization (Patton et al., 2016). The absence of financial support from family members and partners can exacerbate these challenges, placing pregnant adolescents at greater risk of experiencing negative health outcomes and socioeconomic disparities.

The findings indicate that 73% of the participants encountered various obstacles, including financial constraints, transportation difficulties, long wait times at facilities, and healthcare perceived lack confidentiality. These barriers not only impede access to prenatal care but also exacerbate existing health disparities and increase the risk of adverse maternal and neonatal outcomes. Financial constraints represent a significant barrier to healthcare access for pregnant adolescent girls, as they often lack the financial resources necessary to cover the costs associated with prenatal care services, including antenatal visits, laboratory tests, medications, and delivery expenses. Studies have shown that financial barriers contribute to delayed initiation of prenatal care, inadequate use of essential health services, and increased maternal morbidity and mortality rates among adolescent mothers (Browne et al., 2014). The inability to afford healthcare services further perpetuates The study revealed that 70% of the participants socio-economic inequalities and exacerbates the experienced stigma and discrimination from various vulnerability of pregnant adolescents. Transportation sources, including family members, peers, and difficulties pose another significant challenge for healthcare providers. One of the most distressing aspects pregnant adolescent girls seeking maternal healthcare of stigma and discrimination experienced by pregnant services, particularly in resource-constrained settings adolescent girls is its pervasive nature within their where public transportation options may be limited or

unreliable. Research has shown that transportation healthcare accessibility and quality, and ensuring barriers contribute to delayed care-seeking behaviour, uninterrupted access to education and reproductive increased home births, and preventable maternal and health information. neonatal deaths among underserved populations (Gage et al., 2017).

The findings reveal that 96.6% of the participants I would like to express my deep gratitude to my supervisors, experienced disrupted education due to their pregnancy, leading to limited opportunities for academic advancement and exacerbating feelings of insecurity and uncertainty about their future. Education disruption among pregnant adolescent girls occurs for various reasons, including social stigma, school policies, and personal circumstances. Pregnant adolescents often face judgment, discrimination, and ostracization from peers and school authorities, which may result in expulsion, suspension, or dropout from school. Additionally, school policies regarding pregnancy and parenthood may lack adequate support mechanisms and accommodations for pregnant students, leading to disengagement and disconnection from the educational system. Personal circumstances such as financial constraints, lack of familial support, and childcare responsibilities further compound the challenges faced by pregnant adolescents in continuing their education. The consequences of education disruption for pregnant adolescent girls are far-reaching and multifaceted. Firstly, interrupted schooling limits their access to formal education and decreases their chances of completing secondary or higher education, thereby reducing their future earning potential and socio-economic mobility. Studies have shown that adolescent mothers are more likely to have lower educational attainment. higher rates unemployment, and lower income levels compared to their peers who do not experience early pregnancy (Ngui et al., 2013). This perpetuates the cycle of poverty and exacerbates socio-economic inequalities within communities.

Conclusion and Recommendations

The findings of the study underscore the multifaceted challenges faced by pregnant adolescent girls in Port Harcourt, Rivers State, and similar contexts. Social stigma and discrimination, coupled with a lack of support from family members and partners, create significant barriers to accessing essential maternal healthcare services. Moreover, the disruption of education further compounds the vulnerability of pregnant adolescents, limiting their opportunities for academic and socioeconomic advancement. Addressing these challenges requires coordinated efforts from policymakers, healthcare providers, communities, and individuals to create supportive environments and dismantle systemic barriers. Interventions should focus on raising awareness about the harmful effects of stigma, promoting inclusive and non-judgmental attitudes, providing comprehensive support systems for pregnant adolescents, improving

Acknowledgments

Dr. Iroro Yarhere and Dr. Aluko Joel, for their unwavering support, guidance, and feedback, which were crucial to shaping this research. I am also thankful to the research participants for their cooperation and contributions, which made the study possible. Special thanks go to my colleagues and friends. Vivian Pie. Madonna Wichendu, and Ogeh Blessed, for their camaraderie and support. Finally, I am profoundly grateful to my family-my husband, Sir Julius Uhuegbulem, and my children, Chiagozie, Chibuzor, Chinonso, and Chieloka-for their constant love and encouragement throughout my academic journey.

Funding

There was no funding source for this study.

Competing Interest

The authors declare no conflict of interest.

References

Browne, J. L., Kayode, G. A., Arhinful, D. K., Fidder, S. A., & Grobbee, D. E. (2014). "Health insurance determines antenatal, delivery and postnatal care from utilization: Evidence the Demographic and Health Surveillance data." Maternal and Child Health Journal, 18(6), 1445-1463.

East, M. P., & Reyes, B. T. (2019). Adolescent pregnancy and educational attainment: A systematic review and meta-analysis. Journal of Adolescent Health, 65(4), 446-454.

Ganchimeg, T., Ota, E., Morisaki, N., Laopaiboon, M., Lumbiganon, P., Zhang, J., ... & Mori, R. (2014). Pregnancy and childbirth outcomes among adolescent mothers: a World Health Organization multicountry study. Journal of Adolescent Health, 55(6), S42-S50. doi: 10.1016/j.jadohealth.2014.08.016.

Chandra-Mouli, V., Camacho, A. V., Michaud, P. A., & WHO Adolescent Working Group. (2013). WHO guidelines on preventing early pregnancy and poor reproductive outcomes among adolescents in developing countries. Journal of Adolescent Health, 52(5), 517-522. doi: 10.1016/j.jadohealth.2013.03.003.

Mmari, K., Blum, R. W., Sonenstein, F. L., & Marshall, B. D. (2016). Adolescents' perceptions of health from disadvantaged urban communities: findings from the WAVE study. Social Science & 95-101. Medicine, 153, 10.1016/j.socscimed.2016.02.031

Karen, A., Ogunlaja, O. A., & Adeyemo, F. O. (2013). Psychosocial experiences of pregnant

- adolescents in a rural area of Nigeria. Journal of Nursing Education and Practice, 3(11), 1-8.
- Kassa, G. M., Arowojolu, A. O., Odukogbe, A. A., Yalew, A. W., & Zeleke, B. M. (2016). Prevalence and determinants of adolescent pregnancy in Africa: a systematic review and Meta-analysis. Reproductive Health, 13(1), 1-11. doi: 10.1186/s12978-016-0221-x.
- Koniak-Griffin, D., Verzemnieks, I. L., & Anderson, N. L. R. (2003). Teenage pregnancy: current trends and issues. Nursing for Women's Health, 7(2), 176-184. doi: 10.1111/j.1751-486X.2003.tb01591. x.
- Lim, S., Chian, L. H., & Ho, C. M. (2020). Perceptions of pregnant teenagers on discrimination and prejudice: a qualitative study in Singapore. Journal of Adolescent Health, 66(3), 394-399.
- Oche, M. O., Umar, A. S., Gana, G. J., & Ango, J. T. (2013). Adolescent pregnancy and the challenges of maternal mortality in a tertiary institution in North-Western Nigeria. Sub-Saharan African Journal of Medicine, 1(1), 7-12. doi: 10.4103/2384-5147.109344
- Patton, G. C., Sawyer, S. M., Santelli, J. S., Ross, D. A., Afifi, R., Allen, N. B., ... & Viner, R. M. (2016). "Our future: A Lancet commission on adolescent health and wellbeing." The Lancet, 387(10036), 2423-2478.
- Sipsma, H., Binswanger, I. A., & Kershaw, T. (2021). Factors contributing to depressive symptoms in pregnant teenagers: Findings from the National Longitudinal Study of Adolescent to Adult Health. JAMA Pediatrics, 175(11), 1096-1105.
- World Health Organization. (2019). Adolescent development. Retrieved from https://www.who.int/maternal_child_adolescent/topics/adolescence/dev/en/