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Adolescent childbirth in the service area of Walelagama Primary Health Center, Jayawijaya Regency: A phenomenological study

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Abstract

Background: Early-age childbirth remains an important reproductive health problem because it increases maternal, neonatal, psychosocial, educational, and social risks, particularly in geographically isolated communities.
Purpose: To explore women's lived experiences, family and community perceptions, socio-cultural conditions, educational and socioeconomic contexts, and access to reproductive health information and services related to early-age childbirth.
Method: A qualitative phenomenological design was used. Informants were selected purposively and consisted of women who gave birth before the age of 20 years, husbands or family members, health workers, and community figures. Data were collected through in-depth interviews supported by field notes and were analyzed thematically using data reduction, data display, and conclusion drawing.
Results: Five themes emerged: difficult childbirth experiences, normalization of early-age childbirth, shifting socio-cultural influences, limited education and economic readiness, and restricted access to reproductive health information and maternal health services.
Conclusion: Early-age childbirth in this setting is shaped by interconnected individual, family, socio-cultural, economic, and health-service factors. Community-based reproductive health education, stronger family involvement, and culturally sensitive adolescent-friendly maternal health services are needed to reduce early-age childbirth.

Keywords: Adolescent Pregnancy; Early-Age Childbirth; Primary Health Care; Reproductive Health; Socio-Cultural Factors.

INTRODUCTION

Childbirth is a physiological process in which the fetus, placenta, and membranes are expelled from the uterus through the birth canal. In maternal health practice, childbirth is generally considered normal when it occurs at term and without major complications. However, childbirth among adolescent girls or women under 20 years of age is categorized as a high-risk reproductive event because physical, psychological, and social readiness may not yet be optimal (Ministry of Health of the Republic of Indonesia, 2022; World Health Organization, 2024).

Early-age childbirth is a global reproductive health concern. The World Health Organization emphasizes that adolescent mothers aged 10-19 years have higher risks of eclampsia, puerperal endometritis, and systemic infections than women aged 20-24 years, while babies born to adolescent mothers have higher risks of low birth weight, preterm birth, and severe neonatal conditions. This issue is not merely biomedical; it is closely related to child marriage, low educational attainment, poverty, gender norms, limited parental supervision, and poor

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access to reproductive health information (World Health Organization, 2024; United Nations Children's Fund, 2023; United Nations Population Fund, 2022).

In Indonesia, childbirth among adolescents remains an important public health issue. Pregnancy before 20 years of age is considered high risk because reproductive organs and psychological preparedness may not be fully mature. National reproductive health programs therefore emphasize delaying pregnancy, improving adolescent reproductive health literacy, and strengthening access to maternal health services (Ministry of Health of the Republic of Indonesia, 2015).

Recent evidence from Indonesia shows that adolescent pregnancy is shaped by overlapping pathways, including child marriage, stigma around premarital pregnancy, limited sexuality education, discontinuation of schooling, family pressure, and restricted access to youth-friendly services. Adolescent pregnancy in Indonesia cannot be understood only as an individual behavior, because it is embedded in social norms, family expectations, and institutional barriers. Therefore, the need for contextual interventions that respond to adolescents' lived realities was emphasized (Ayuandini, Habito, Ellis, Kennedy, Akiyama, Binder, & Hennegan, 2023).

The situation is more complex in geographically challenging areas such as Papua and Papua Highlands. Mountainous terrain, dispersed settlements, transportation barriers, unequal distribution of health workers, and socio-cultural diversity may influence how communities understand marriage, pregnancy, childbirth, and health-seeking behavior. In Jayawijaya Regency, distance and access remain important concerns for maternal and child health services, especially for communities living outside the urban center of Wamena (Statistics Indonesia of Papua Province, 2025; Health Office of Jayawijaya Regency, 2023).

Preliminary data obtained from the maternal and child health program at Walelagama Primary Health Center showed that 12 mothers gave birth before the age of 20 years in 2024 and 14 mothers in 2025. Thus, 26 cases of childbirth among women younger than 20 years were recorded during 2024-2025. These local data indicate that early-age childbirth is not an abstract reproductive health problem, but a real phenomenon experienced by families in the service area of Walelagama Primary Health Center.

Previous studies have often examined adolescent pregnancy and early marriage using quantitative approaches that focus on risk factors and statistical associations. These approaches are important, but they may not fully explain how young women, families, and communities interpret early-age childbirth within their own social and cultural contexts. A qualitative phenomenological approach is therefore relevant for exploring lived experiences and meanings behind this phenomenon (Creswell, & Poth, 2016; Moleong, 2018).

Despite the growing body of research on adolescent pregnancy, limited attention has been given to the lived experience of early-age childbirth in Papua Highlands, where geographical isolation, cultural norms, family structures, and access barriers may interact differently from urban and western Indonesian settings. This study is therefore significant because it provides culturally grounded evidence for designing context-sensitive reproductive and maternal health interventions in the service area of Walelagama Primary Health Center.

This study aimed to explore the experiences of women who gave birth at an early age and to understand perceptions, socio-cultural conditions, educational and socioeconomic factors, and access to reproductive health information and services contributing to early-age childbirth in the service area of Walelagama Primary Health Center, Jayawijaya Regency.

RESEARCH METHOD

A qualitative design with a phenomenological approach was employed. This design was selected because the study sought to understand the lived experiences of women who gave birth at an early age and the meanings attached to those experiences within the local socio-cultural context. The study was conducted in the service area of Walelagama Primary Health Center, Jayawijaya Regency, Papua Highlands Province, Indonesia, from March to April 2026.

The social setting of the study included communities served by Walelagama Primary Health Center. The health center serves Walelagama and Siepkosi districts with 16 villages. The area is

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located approximately 11 km from Wamena City and can be reached within 15-20 minutes by road from the city center. Nevertheless, several villages are located in hilly and mountainous areas and are more difficult to access, which may affect the use of health services.

Informants were selected using purposive sampling. The main informants were women who had given birth before the age of 20 years, were able to communicate their experiences, lived in the service area of Walelagama Primary Health Center, had received maternal health services in the area, and voluntarily agreed to participate by signing informed consent. Supporting informants included husbands or family members, health workers from the maternal and child health program, and community figures or health cadres. The study involved 10 informants, consisting of six main informants and four supporting informants. Recruitment continued until the information obtained was considered thematically saturated.

Data were collected through in-depth interviews using a semi-structured interview guide. The guide explored childbirth experiences, perceptions of early-age childbirth, socio-cultural influences, educational and economic conditions, and access to reproductive health information and maternal health services. Field notes were used to record contextual information during data collection. Interviews were audio-recorded with participants' permission and transcribed for analysis.

Data were analyzed thematically using the interactive analysis model consisting of data reduction, data display, and conclusion drawing or verification (Miles, Huberman, & Saldana, 2014). The researcher read the transcripts repeatedly, identified meaningful statements, organized codes, developed categories, and synthesized the main themes. Data credibility was strengthened through triangulation between main and supporting informants, repeated reading of transcripts, and comparison between interview findings and field notes.

To ensure the rigor of qualitative findings, this study applied trustworthiness criteria, including credibility, transferability, dependability, and confirmability. Credibility was strengthened through triangulation of multiple informants and repeated reading of interview transcripts. Transferability was supported by providing detailed contextual descriptions of the study setting. Dependability and confirmability were ensured through systematic documentation of data collection and analysis processes, allowing transparency and consistency in interpretation.

This study followed ethical principles for research involving human participants, including respect for autonomy, voluntary participation, informed consent, confidentiality, and the right to withdraw from the study. Identifying information was removed from the manuscript, and informants were represented using codes. Ethical approval was obtained from Ethics Committee of Health Research, with approval number 090/KEPK-FKM UC/2026.

RESEARCH RESULTS

Study Setting and Informant Context

Walelagama Primary Health Center serves communities in a mountainous area of Jayawijaya Regency. The service area includes 16 villages with approximately 7,180 residents. Most community members work as farmers, gardeners, or informal workers. Health services are provided through the primary health center, auxiliary health posts, village maternity posts, and integrated service posts. However, utilization remains suboptimal because of limited health workers, scattered settlements, and geographical barriers.

The study involved women who gave birth before the age of 20 years as main informants and husbands, family members, health workers, and community representatives as supporting informants. Most main informants had relatively low educational attainment and limited economic resources. These conditions influenced their understanding of reproductive health, readiness for marriage and pregnancy, and ability to access health services consistently.

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Table 1. Informants Involved in the Study

Informant Type	Criteria	Estimated Number
Main Informants	Women who gave birth before the age of 20 years in the service area of Walelagama Primary Health Center	6
Supporting Informants	Husbands or family members of women who gave birth at an early age	2
Supporting Informants	Health workers or maternal and child health staff at Walelagama Primary Health Center	1
Supporting Informants	Community figures or health cadres familiar with the local context	1

Source: Primary data, 2026

Theme 1. Childbirth experiences at an early age

The first theme reflects difficult childbirth experiences reported by women who gave birth at an early age. Informants described childbirth as physically demanding, painful, and accompanied by anxiety. One informant explained that the first childbirth was difficult because she was very young: "There was a little problem ... it was very difficult for the baby to come out because it was the first time" (Informant 1, translated). Another informant reported that childbirth occurred at a very young age and the baby was born prematurely: "The girl was about thirteen or fourteen years old ... the baby was not yet full term, around eight months" (Informant 2, translated).

Theme 2. Family and community perceptions of early-age childbirth

The second theme relates to the perception that childbirth at an early age is still considered relatively common in the community. Informants described adolescent marriage and pregnancy as consequences of emotional decisions and changes in adolescent behavior. One informant stated: "Nowadays children marry only because of emotion ... they cannot control their feelings, so it just happens" (Informant 3, translated). Another informant described the difficulty parents face in supervising adolescents: "We parents can no longer control these children ... after it happens, then we are surprised" (Informant 4, translated).

Theme 3. Shifting socio-cultural influences

The third theme indicates that socio-cultural factors continue to influence early-age childbirth, although their pattern has shifted. In the past, early marriage was described as more strongly influenced by parents or customary arrangements. At present, informants suggested that adolescent relationships and mutual attraction increasingly contribute to early marriage and pregnancy. One informant explained: "In the past, parents arranged marriage ... but now the children themselves, because they like each other, then it happens" (Informant 5, translated).

Theme 4. Education and economic readiness

The fourth theme highlights the role of low education and limited economic readiness. Most informants had limited educational attainment, and some did not continue to higher education. One informant noted: "Only completed senior high school ... there was no plan to continue to college" (Informant 3, translated). Economic limitations were also described in relation to unstable work and family income. Another informant said: "There is no permanent job ... the husband only works as a motorcycle taxi driver to support the family" (Informant 6, translated).

Theme 5. Access to reproductive health information and health services

The fifth theme concerns limited access to reproductive health information and maternal health services. Informants reported that information was obtained only in limited ways, mainly through school activities or integrated service posts. One informant stated: "From school, we received a little information from the teacher" (Informant 2, translated). Another informant reported that health education had not been implemented consistently: "There was no counseling" (Informant 6, translated).

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Table 2. Summary of Themes, Key Findings, and Implications

Theme	Key finding	Illustrative statement	Implication
Childbirth Experience	Young mothers experienced difficult childbirth and risk of premature birth	"It was very difficult for the baby to come out."	Strengthen early risk detection and counseling for adolescent pregnancy
Perception	Early-age childbirth was still perceived as common	"Children marry only because of emotion."	Strengthen family communication and community awareness
Socio-Cultural Influence	Influence shifted from parental/customary decisions to adolescent relationships, but permissive norms remain	"In the past, parents arranged marriage ... now the children themselves."	Use culturally sensitive prevention involving community leaders
Education and Economy	Low education and unstable income reduced reproductive readiness	"Only completed senior high school ... no plan to continue."	Support school retention and economic empowerment
Information and Services	Reproductive health information was limited and not continuous	"From school, we received a little information."	Expand adolescent-friendly and community-based reproductive health services

Source: Primary data, 2026

DISCUSSION

The findings show that early-age childbirth was experienced not only as a biological process but also as a stressful life event. Young mothers reported pain, anxiety, difficulty during labor, and premature birth. This is consistent with evidence that adolescent pregnancy increases the risk of maternal and neonatal complications, including prolonged labor, preterm birth, low birth weight, and severe neonatal outcomes (World Health Organization, 2024; Neal, Channon, Chintsanya, & Madise, 2018; Ganchimeg, Ota, Morisaki, Laopaiboon, Lumbiganon, Zhang, & Mori, 2014).

From the perspective of Blum's health determinant theory, young mothers' health outcomes are shaped not only by biological factors but also by environment, behavior, and health services (Blum, Bastos, Kabiru, & Le, 2012). In this context, early-age childbirth represents an intersection of individual readiness, family circumstances, community norms, and service access. Prevention therefore cannot be limited to clinical counseling during pregnancy; it should begin earlier through adolescent reproductive health education and family-based prevention (Nurdiawan, Koto, Zulvayanti, Atik, Susiarno, Hidayat, & Zulfa, 2021).

The normalization of early-age childbirth in the community suggests that social acceptance may reduce perceived risks associated with adolescent pregnancy. When early marriage and childbirth are culturally tolerated, preventive efforts such as reproductive health education and delayed marriage campaigns may become less effective (Astuti, Hirst, & Bharj, 2020). Similar findings were reported that child marriage prevention must address social norms, family expectations, and gendered power relations (Svanemyr, Chandra-Mouli, Raj, Travers, & Sundaram, 2015).

Green's health behavior theory helps explain this finding. The perception of early-age childbirth as normal may function as a predisposing factor shaping attitudes and decisions regarding marriage and pregnancy. Meanwhile, limited parental control and peer influence may function as reinforcing factors. This condition indicates that prevention strategies should not only target adolescents individually but also strengthen parental

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communication skills, family supervision, and community norms that support delayed marriage and planned pregnancy (Green & Kreuter, 2005).

Although the pattern of early marriage has shifted from arranged practices to adolescent-driven relationships, cultural norms that tolerate early union remain influential. This suggests that cultural transformation is partial rather than complete. Culture consists of values and norms learned and transmitted across generations; therefore, reproductive health messages need to be delivered through culturally acceptable channels involving traditional leaders, religious leaders, parents, and community cadres (Koentjaraningrat, 2015).

The interplay between low educational attainment and economic limitations creates a cycle that increases vulnerability to early-age childbirth. Limited education reduces access to reproductive health information, while economic hardship may encourage early marriage as a coping strategy. Previous research has also shown that child marriage and adolescent pregnancy are closely related to school dropout, poverty, reduced autonomy, and limited future opportunities (United Nations Children's Fund, 2023; Effendi, Handayani, Nugroho, & Hariastuti, 2021).

Limited access to consistent reproductive health information and services further reinforces the risk of early-age childbirth. Inadequate counseling and geographical barriers reduce opportunities for adolescents to obtain accurate knowledge and preventive care. Adolescent-friendly services, outreach programs, school-based education, integrated service posts, home visits, and community meetings are therefore important strategies for increasing access in remote areas (World Health Organization, 2018; Ministry of Health of the Republic of Indonesia, 2015).

Overall, this study strengthens the argument that early-age childbirth in Walelagama is a multidimensional phenomenon shaped by individual, family, socio-cultural, economic, and health-service factors. The implication is that prevention programs should not rely only on biomedical counseling, but should integrate reproductive health literacy, school retention, family engagement, community leadership, and culturally sensitive maternal health services.

CONCLUSIONS

Early-age childbirth in the service area of Walelagama Primary Health Center is influenced by multiple interconnected factors. Women who gave birth before the age of 20 years experienced difficult childbirth, including prolonged labor and premature birth. Families and communities still tended to consider early-age childbirth a common phenomenon, particularly when adolescent relationships and emotional decisions were involved. Socio-cultural influence remained important, although its pattern shifted from parental or customary arrangement toward adolescent-initiated relationships. Low educational attainment and limited economic readiness reduced adolescents' understanding of reproductive health and family preparedness. Access to reproductive health information and maternal health services was still limited, particularly because counseling was not continuous and some communities faced geographical barriers.

Overall, the findings emphasize that early-age childbirth is a multidimensional phenomenon shaped by interconnected individual, social, cultural, economic, and health-system factors. Addressing this issue requires a comprehensive approach that goes beyond clinical interventions and integrates social, educational, and community-based strategies.

RECOMMENDATIONS

It is recommended that Walelagama Primary Health Center strengthen adolescent reproductive health education through school-based programs, integrated service posts, adolescent counseling, and home visits. Health workers should involve parents, husbands, traditional leaders, religious leaders, and community cadres in culturally sensitive prevention programs. The local health office should support adolescent-friendly maternal and reproductive health services, improve outreach to difficult-to-access villages, and integrate prevention of early-age childbirth with education-retention and community empowerment programs. Future studies may explore the perspectives of adolescent boys, parental decision-making, and the role of local cultural leaders in preventing early marriage and early-age childbirth.

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