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Short Communication

Understanding pregnancy outcome decision-making among pregnant adolescents in Vietnam: a qualitative study guided by the social ecological model

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ABSTRACT

Adolescent pregnancy remains a significant public health concern in Vietnam, yet little is known about how pregnant adolescents make decisions regarding pregnancy continuation or termination. This qualitative descriptive study aimed to explore the decision-making processes of pregnant adolescents and identify the multilevel factors influencing pregnancy outcomes using the social ecological model. Purposive sampling was employed to recruit adolescents aged 15-19 years with unintended pregnancies attending a provincial referral maternal and child health hospital in Central Vietnam. Semi-structured, in-depth interviews were conducted until thematic saturation was achieved. Interviews were audio-recorded, transcribed verbatim, and analyzed using Braun and Clarke's six-phase thematic analysis. Twelve adolescents participated, including seven who continued their pregnancies and five who chose pregnancy termination. Seven interconnected themes were identified across four ecological levels. At the individual level, pregnancy recognition was commonly accompanied by emotional shock, uncertainty, and evolving pregnancy intentions. Interpersonal influences included both supportive and coercive roles of family members and partner commitment or rejection. At the community level, religious and moral beliefs, financial insecurity, and limited access to reliable reproductive health information and services substantially shaped decision-making. At the societal level, social stigma and cultural expectations regarding marriage, motherhood, and family reputation further influenced pregnancy outcomes. These findings demonstrate that pregnancy outcome decision-making among Vietnamese adolescents is a dynamic process shaped by interacting influences across multiple ecological levels. Interventions should extend beyond individual counseling to include family engagement, adolescent-friendly reproductive health services, improved access to accurate reproductive health information, and community-based strategies to reduce stigma and support informed, person-centered reproductive decision-making.

Keywords: Adolescent pregnancy, Pregnancy decision-making, Qualitative research, Social ecological model, Reproductive health, Vietnam

INTRODUCTION

Adolescent pregnancy remains a major public health concern worldwide. The World Health Organization (WHO) defines adolescent pregnancy as pregnancy among girls aged 10-19 years. In low- and middle-income countries, approximately 21 million girls aged 15-19 years become pregnant annually, with nearly half experiencing unintended pregnancies and more than half of these ending in abortion. In 2023, the global adolescent birth rate among girls aged 10-14 years was estimated at 1.5 per 1,000 girls.[1]

In Vietnam, adolescent pregnancy remains an important reproductive health issue. Between 2011 and 2020, the

adolescent birth rate ranged from 2.56% to 3.6%.[2] According to the multiple indicator cluster survey 2020-2021, 8.2% of women aged 20-24 years had given birth before age 18, and approximately 300,000 adolescent abortions occur annually.[3,4] Adolescent pregnancy is associated with adverse maternal and neonatal outcomes, including hypertensive disorders, anemia, preterm birth, low birth weight, and neonatal mortality.[5-7]

For adolescents experiencing unintended pregnancy, deciding whether to continue or terminate the pregnancy is often complex. Previous studies have shown that decision-making is influenced by factors operating at multiple levels, including educational aspirations and future plans, family and partner relationships, religious and sociocultural norms, and access to sexuality education and reproductive health services.[8-14]

Despite growing evidence on factors associated with adolescent pregnancy decisions, little is known about how Vietnamese adolescents navigate decisions regarding pregnancy continuation or termination. Guided by the social ecological model, this study aimed to explore pregnancy outcome decision-making among pregnant adolescents in Vietnam and identify the multilevel influences shaping these decisions.

METHODS

Study design and setting

This qualitative descriptive study explored how pregnant adolescents in Vietnam make decisions regarding pregnancy continuation or termination. Semi-structured in-depth interviews were conducted and analyzed using Braun and Clarke's thematic analysis. The social ecological model (SEM) guided interview development, coding, and interpretation of findings across individual, interpersonal, community, and societal levels.

The study was conducted at Da Nang Hospital for women and children, a provincial referral hospital providing obstetric, gynecological, pediatric, and reproductive health services in Central Vietnam.

Participants and recruitment

Participants were recruited through purposive sampling between January and June 2025. Eligible participants were adolescents aged 15-19 years who had experienced an unintended pregnancy and decided either to continue or terminate the pregnancy. Adolescents with severe medical illness, cognitive impairment, or psychological conditions affecting participation were excluded.

Potential participants were identified through antenatal clinics, obstetric wards, and abortion care services. Written informed consent was obtained from all participants, with parental or guardian consent required for those younger than 18 years.

Recruitment continued until thematic saturation was achieved. Saturation was reached after the tenth interview and confirmed through two additional interviews. Twelve adolescents participated, including seven who continued their pregnancies and five who chose pregnancy termination.

Data collection

Semi-structured face-to-face interviews were conducted by the principal investigator, a midwife trained in qualitative research. Interviews took place in a private room between March and June 2025, lasted 30-60 minutes, and were audio-recorded with participant consent. Field notes were taken to document contextual observations.

The interview guide, developed from the SEM and relevant literature, explored pregnancy recognition, decision-making processes, family and partner influences, economic circumstances, healthcare access, and sociocultural factors. Following pilot testing with two eligible adolescents, minor revisions were made to improve clarity. Pilot data were excluded from analysis.

Interviews were transcribed verbatim and de-identified before analysis.

Data analysis

Data were analyzed using Braun and Clarke's six-phase thematic analysis. Two researchers independently coded transcripts, and discrepancies were resolved through discussion until consensus was reached. The SEM informed theme organization and interpretation.

Trustworthiness

Trustworthiness was enhanced through investigator triangulation, peer debriefing, reflexive memoing, and maintenance of an audit trail.

Ethical considerations

Ethical approval was obtained from the Institutional Review Board of Nam Dinh University of Nursing (approval No. 602/GCN-HĐĐĐ, March 5, 2025). Written informed consent was obtained from all participants, with parental or guardian consent required for those younger than 18 years. All transcripts were de-identified to ensure confidentiality.

RESULTS

Participant characteristics

Participant characteristics are presented in Table 1. Twelve adolescents aged 16-19 years participated in the study. Seven continued their pregnancies and five chose pregnancy termination.

Table 1: Characteristics of participants (n=12).

Characteristic	N (%)
Age 15-17 years	5 (41.7)
Age 18-19 years	7 (58.3)
Student	7 (58.3)
Employed	2 (16.7)
Out of school	3 (25.0)
Continued pregnancy	7 (58.3)
Termination	5 (41.7)

Most participants were students and recognized their pregnancies during the first trimester. Slightly more than half continued their pregnancies, whereas the remainder chose pregnancy termination.

Themes identified

Seven themes were identified across four levels of the social ecological model in Table 2 and Figure 1.

Table 2 presents the seven themes and fourteen subthemes identified through thematic analysis, organized according to the four levels of the social ecological model. The findings demonstrate that pregnancy outcome decision-making among pregnant adolescents was influenced by multiple interacting factors operating at the individual, interpersonal, community, and societal levels. Rather than being determined by a single influence, adolescents' decisions evolved through a dynamic process shaped by emotional responses, family and partner relationships, socioeconomic circumstances, access to reproductive health services, and prevailing social and cultural norms.

Individual level

Theme 1: Emotional shock and uncertainty following pregnancy recognition

Emotional shock and uncertainty after pregnancy recognition

Pregnancy recognition was commonly accompanied by shock, fear, confusion, and uncertainty. Most participants described the pregnancy as unexpected and reported difficulty deciding whether to continue or terminate it.

One participant shared: "I was very surprised and confused. I could not decide whether to terminate the pregnancy or continue it. I waited to see how my family would react before making my decision" (P1, age 17).

These experiences reflected uncertainty about future consequences and available options.

Changing pregnancy intentions and final decisions

Initial pregnancy intentions varied. Some participants preferred to continue the pregnancy because of stable relationships or marriage plans, whereas others considered termination because of educational, financial, or parenting concerns. Several remained undecided before reaching a final decision.

Table 2: Themes and subthemes influencing pregnancy outcome decisions among adolescents according to the social ecological model.

Ecologic-al level	Theme	Subthemes
Individ-ual	Emotional shock and uncertainty following pregnancy recognition	Emotional shock and uncertainty after pregnancy recognition; changing pregnancy intentions and final decisions
Interper-sonal	Family support and family pressure as dual influences	Family support facilitates pregnancy continuation; family pressure and conflicting opinions contribute to pregnancy termination
Interper-sonal	Partner commitment shapes pregnancy decisions	Partner rejection and lack of responsibility; partner support and commitment facilitate pregnancy continuation
Commu-nity	Religious and moral beliefs shape pregnancy outcome decisions	Religious beliefs supporting pregnancy continuation; moral concerns regarding pregnancy termination
Commu-nity	Financial insecurity as a barrier to childbearing	Financial hardship encourages pregnancy termination; family economic support facilitates pregnancy continuation
Commu-nity	Limited access to reliable reproductive health services	Reliance on informal information sources; barriers to professional healthcare access
Societal	Social stigma and cultural expectations influence pregnancy outcomes	Community stigma surrounding adolescent pregnancy; cultural expectations regarding marriage and motherhood

One participant explained "When I found out that I was pregnant, I was very worried. Although my boyfriend and I had been together for a year and planned to get married, I did not expect to become pregnant so soon. From the moment I learned about the pregnancy, I never intended to have an abortion" (P12, age 19). Initial intentions did not always predict final outcomes. Decisions often changed as adolescents considered family support, relationship

stability, moral beliefs, and perceived consequences of abortion, highlighting the dynamic nature of pregnancy decision-making.

Interpersonal level

Theme 2: Family support and family pressure as dual influences

Family support encourages pregnancy continuation

Parental support emerged as an important factor encouraging pregnancy continuation. Participants described receiving emotional reassurance, practical assistance, and commitments from family members to help care for the child, which increased confidence in continuing the pregnancy.

"My father said that children are gifts from God. Since I was already pregnant, he encouraged me to keep the baby and promised that my parents would support me" (P1, age 17).

Family support helped reduce uncertainty and made pregnancy continuation appear more manageable.

Family pressure contributes to pregnancy termination

Conversely, some adolescents experienced pressure from family members to terminate the pregnancy. Concerns about education, future opportunities, and family reputation often influenced family attitudes toward pregnancy continuation. Conflicting opinions among relatives sometimes increased uncertainty and contributed to termination decisions.

"My parents and aunt supported me in keeping the pregnancy, but my uncle advised me to terminate it because he worried about my future. Eventually, I decided to have an abortion" (P3, age 19).

These findings highlight the dual role of families as both sources of support and sources of pressure in adolescent pregnancy decision-making.

Theme 3: Partner commitment shapes pregnancy decisions

Partner rejection and lack of responsibility

Partner involvement emerged as an important influence on pregnancy outcome decision-making. Several adolescents reported indifference, rejection, or denial of responsibility from their partners after disclosing the pregnancy, leaving them feeling unsupported and uncertain about the future.

One participant described "When I told my boyfriend that I was pregnant, he was indifferent. He said that if I gave birth, he would request a DNA test and only acknowledge the child if it was really his. I felt that he was simply avoiding responsibility and did not care about me. He even said, 'how do I know it is my child?' After that, I completely cut off contact with him" (P1, age 17).

Another participant stated "My boyfriend did not accept the baby and stopped contacting me" (P2, age 16).

These experiences often intensified emotional distress and complicated pregnancy-related decision-making.

Partner support and commitment facilitate pregnancy continuation

In contrast, supportive and committed partners often encouraged pregnancy continuation. Emotional support, willingness to assume responsibility, and plans for marriage helped adolescents feel more secure when facing family and societal pressures.

One participant explained "My boyfriend encouraged me to keep the pregnancy and told his parents that he wanted them to come to my house and ask for my hand in marriage" (P6, age 17).

Some adolescents also reported that their partners supported whatever decision they ultimately made regarding the pregnancy. Partner commitment strengthened emotional security and confidence in decision-making.

Overall, supportive partners often facilitated pregnancy continuation, whereas rejection or abandonment increased vulnerability and uncertainty.

Community level

Theme 4: Religious and moral beliefs shape pregnancy outcome decisions

Religious beliefs supporting pregnancy continuation

Religious beliefs influenced pregnancy outcome decisions among some participants. Beliefs that children are gifts from God and that pregnancy should be accepted rather than terminated often encouraged pregnancy continuation despite initial uncertainty or family opposition.

One participant recalled "My father said that children are gifts from God. If a child comes into your life, you should accept it. Once I was pregnant, the only option was to continue the pregnancy and give birth" (P1, age 17).

The influence of religion was often indirect, operating through parents, extended family members, or the partner's family.

These beliefs shaped family attitudes toward abortion and affected the support adolescents received during decision-making.

Moral concerns regarding pregnancy termination

Several participants described how religious and moral values contributed to acceptance of the pregnancy, even when family members initially opposed it. Concerns about the moral acceptability of abortion often outweighed practical considerations such as education, finances, or future plans.

One participant explained "My boyfriend's family is catholic and strongly opposed abortion. Although my father initially objected to the pregnancy, he eventually accepted it because of pressure from my boyfriend's family and my older sister. At one point, my father even took me to the hospital for an abortion, but later he accepted my pregnancy and supported me in giving birth" (P11, age 18).

Overall, religious and moral beliefs influenced pregnancy decisions primarily through family attitudes and often encouraged pregnancy continuation by framing abortion as morally unacceptable.

Theme 5: Financial insecurity as a barrier to childbearing

Financial hardship encourages pregnancy termination

Financial insecurity emerged as a major influence on pregnancy outcome decision-making. Many participants viewed economic hardship as a barrier to continuing the pregnancy because they remained financially dependent on their families and had not completed their education. Concerns about the costs of childbirth and childrearing were particularly common among adolescents from low-income households. One participant explained "My family has financial difficulties, so I could not continue the pregnancy. My parents make a living as street vendors and work far from home, so I was raised by my grandparents. I also have two younger siblings who are still in school" (P2, age 16). Financial dependence was also a recurring concern among adolescents and their partners who were still studying and lacked independent income.

"My boyfriend and I are both still in school, so we do not have enough money to raise a child. At the moment, all of our living expenses are paid for by our parents" (P7, age 19).

Overall, economic hardship and limited financial autonomy frequently contributed to decisions to terminate the pregnancy.

Family economic support facilitates pregnancy continuation

Despite financial challenges, some participants reported that strong family support reduced economic concerns and made pregnancy continuation more feasible.

"No matter how difficult our financial situation is, my mother said she would do everything she could to support me" (P10, age 17).

These findings suggest that pregnancy decisions were influenced not only by financial resources but also by adolescents' perceptions of available family support.

Theme 6. Limited access to reliable reproductive health services

Reliance on informal information sources

Access to reliable reproductive health information was often limited. Many adolescents were uncertain where to obtain trustworthy information and therefore relied on internet searches, social media, and online forums after discovering their pregnancies. Information about abortion methods, gestational age requirements, and potential complications was commonly sought but often difficult to verify.

"I searched on Google for information about abortion methods that would be suitable for my stage of pregnancy and the possible risks and complications associated with abortion" (P3, age 19).

These findings suggest a reliance on informal information sources in the absence of accessible adolescent-friendly reproductive health counseling.

Barriers to professional healthcare access

Only a few participants reported consulting healthcare professionals before making pregnancy-related decisions. Professional guidance helped adolescents and their families better understand available options and access appropriate care. "My mother was worried that an abortion might affect my health, so she consulted a doctor at a private clinic and decided to bring me to the Da Nang Hospital for women and children" (P2, age 16). Geographical and logistical barriers also limited healthcare access for some participants. "When I found out I was pregnant, I did not know what to do. The hospital is about an hour away from my home, and I could not travel there by myself" (P5, age 17).

Overall, access to reproductive health services was shaped by family support, geographic accessibility, and the availability of professional guidance.

Societal level

Theme 7: Social stigma and cultural expectations influence pregnancy outcomes

Community stigma surrounding adolescent pregnancy

Social stigma was an important influence on pregnancy outcome decision-making. Participants frequently

expressed concerns about being judged by community members, neighbors, and acquaintances, resulting in feelings of shame and anxiety that sometimes-encouraged consideration of pregnancy termination.

"A neighbor advised me to terminate the pregnancy because I was still too young and would be wasting my youth if I had a child" (P10, age 17).

Although some adolescents reported being less affected by community opinions, strong family support often helped buffer the effects of stigma.

Cultural expectations regarding marriage and motherhood

Cultural expectations regarding marriage, family honor, and women's social roles also shaped pregnancy decisions. Traditional beliefs about marriage and family obligations influenced how adolescents and their families evaluated available options following pregnancy recognition.

"My boyfriend's family agreed to the marriage, but they did not want to organize a traditional wedding ceremony. My parents could not accept that because they believed a woman has only one opportunity to be a bride. As a result, I ended my relationship with my boyfriend and decided to terminate the pregnancy" (P3, age 19).

These findings suggest that pregnancy decisions were influenced not only by individual preferences but also by broader social norms regarding marriage, family reputation, and motherhood.

DISCUSSION

This study explored factors influencing pregnancy outcome decision-making among pregnant adolescents in Vietnam using the social ecological model. Seven themes emerged across individual, interpersonal, community, and societal levels, highlighting that decisions to continue or terminate a pregnancy are not determined by a single factor but rather by the interaction of emotional, relational, economic, healthcare, and sociocultural influences.

Individual-level influences

The first theme identified emotional shock and uncertainty following pregnancy recognition as the initial response experienced by most participants. Consistent with previous qualitative studies, adolescents commonly described feelings of fear, confusion, shame, and emotional distress after discovering an unintended pregnancy. Koiwa et al reported that emotional distress and limited autonomy frequently complicate pregnancy decision-making among adolescents, while Bain et al found that fear, disappointment, and regret were common reactions immediately following pregnancy recognition.[15,16] These findings suggest that unintended pregnancy represents not only a medical event but also a profound psychosocial crisis during adolescence, a developmental stage characterized by emotional vulnerability, identity formation, and increasing dependence on family support.

Our findings further demonstrate that adolescents' intentions regarding pregnancy continuation or termination were dynamic rather than fixed, evolving as they interacted with family members, partners, healthcare providers, and changing social circumstances. This observation reinforces the ecological perspective that reproductive decision-making is a continuous negotiation process rather than a single autonomous choice. Although many participants initially expressed a preference for pregnancy termination, their decisions frequently changed after considering family expectations, financial constraints, relationship stability, and perceived social consequences. Similar patterns have been reported by Bearak et al, who estimated that approximately half of unintended pregnancies ultimately result in live births, and by Bain et al, who demonstrated that adolescents often perceive themselves as decision-makers while simultaneously experiencing substantial constraints imposed by their social environment.[17,18] In the Vietnamese context, these changing intentions may also reflect the collectivist nature of family decision-making, where adolescents often balance their own preferences against the expectations and values of parents and other family members.

An important finding of this study was that several participants recognized their pregnancies relatively late, with one participant remaining unaware until 22 weeks of gestation. Delayed pregnancy recognition substantially reduced available reproductive options, and some adolescents who initially preferred pregnancy termination ultimately continued their pregnancies because termination was no longer legally or practically feasible. Similar findings have been reported by Bain et al and Griffin et al, highlighting delayed pregnancy recognition as an important contributor to reduced reproductive autonomy among adolescents.[11,19] Beyond limiting access to abortion services, delayed recognition may also postpone antenatal care, increase psychological distress, and reduce opportunities for timely counseling and informed decision-making. This finding underscores the importance of improving adolescents' reproductive health literacy and their ability to recognize early signs of pregnancy.

Taken together, these findings indicate that pregnancy outcome decision-making among Vietnamese adolescents is influenced not only by individual emotions but also by adolescents' capacity to recognize pregnancy early, understand available reproductive options, and navigate competing social expectations. Therefore, interventions focusing solely on individual counseling are unlikely to be sufficient. Comprehensive sexuality education, confidential adolescent-friendly reproductive health services, and timely pregnancy testing and counseling

should be strengthened to facilitate informed and autonomous reproductive decision-making while respecting adolescents' evolving capacities and sociocultural contexts.

Interpersonal-level influences

Family emerged as one of the most influential interpersonal factors shaping adolescents' pregnancy outcome decisions. Consistent with previous qualitative studies, parental reactions frequently generated considerable psychological pressure during the early stages of pregnancy recognition. Initial responses of disappointment, anger, or disbelief often intensified adolescents' fear and uncertainty, whereas subsequent acceptance, emotional support, and practical assistance encouraged pregnancy continuation. Similar findings have been reported in Mozambique, where family support, particularly from mothers, played a central role in facilitating pregnancy continuation and providing childcare after birth.[19] These findings highlight that family influence extends beyond emotional support to include practical resources, financial assistance, and guidance, all of which are particularly important for adolescents who remain economically and socially dependent on their families.

Our findings also demonstrate that family influence may function as both a protective factor and a source of constraint. Several participants described experiencing explicit or implicit parental pressure to terminate the pregnancy because of concerns about educational disruption, financial hardship, or family reputation. These findings are consistent with those of Koiwa et al and Bain et al, who identified parents, particularly fathers, as key decision-makers in adolescents' reproductive choices.[15,11] In the Vietnamese sociocultural context, where family decision-making is often collective rather than individual, adolescents may prioritize parental expectations over their own preferences to maintain family harmony and avoid social disapproval. Consequently, reproductive decisions are frequently negotiated within the family rather than made independently by the pregnant adolescent.

Partner commitment was another important interpersonal influence identified in this study. Adolescents whose partners accepted responsibility, provided emotional reassurance, or expressed willingness to marry were generally more likely to continue their pregnancies. In contrast, partner rejection, denial of paternity, or withdrawal of emotional and financial support increased feelings of isolation and uncertainty, often contributing to pregnancy termination. Similar associations have been reported in Mozambique and Burkina Faso, where partner involvement substantially influenced pregnancy outcomes.[19,20] However, consistent with previous research, partner support alone was rarely sufficient to determine the final decision when family expectations, financial insecurity, or social stigma conflicted with the partner's wishes.[21] This finding suggests that partner influence should be understood within a broader network of interpersonal relationships rather than as an isolated determinant.

Overall, our findings demonstrate that pregnancy outcome decision-making among Vietnamese adolescents is inherently relational. Rather than exercising completely independent autonomy, adolescents negotiated their decisions within a complex interpersonal environment characterized by emotional dependence, economic reliance, and cultural expectations surrounding family responsibility. These findings emphasize the importance of involving supportive family members and partners, where appropriate and with the adolescent's consent, in counseling and adolescent-friendly reproductive health services. Family-centered communication and couple-based counseling may facilitate informed decision-making while respecting adolescents' autonomy and reproductive rights.

Community-level influences

Religious and moral beliefs emerged as important community-level influences encouraging pregnancy continuation. Unlike findings from some African studies that reported a relatively limited role of religion in pregnancy outcome decisions, our findings suggest that religious and moral values may exert a stronger influence within certain Vietnamese families.[11,12] Beliefs that children are gifts from God and perceptions of abortion as morally unacceptable often encouraged both adolescents and their families to continue the pregnancy. These findings indicate that religious beliefs function not only as personal convictions but also as shared family values that shape collective reproductive decision-making. In the Vietnamese context, where family relationships and moral obligations remain highly valued, religious beliefs may reinforce family support for continuing a pregnancy while simultaneously discouraging pregnancy termination.

Interestingly, religious influences were generally mediated through parents or other family members rather than originating from the adolescents themselves. Similar observations have been reported by Bain et al and Kaboré et al, who found that moral and religious values often influence adolescents' reproductive decisions indirectly through family expectations and community norms.[16,20] Several participants described feelings of guilt and moral conflict when considering abortion, suggesting that pregnancy outcome decisions were influenced not only by practical considerations but also by deeply rooted ethical and cultural values. These findings highlight the importance of providing non-judgmental counseling that respects adolescents' cultural and religious backgrounds while ensuring informed and autonomous decision-making.

Financial insecurity was another major determinant of pregnancy outcomes. Adolescents who remained financially dependent on their families and were still

pursuing education frequently perceived childbearing as economically unmanageable. Similar findings have been reported in Mozambique, Burkina Faso, and Ghana, where financial hardship consistently emerged as an important driver of pregnancy termination.[11,19,20] In our study, however, financial difficulties extended beyond the direct costs of pregnancy and childcare. Participants were also concerned about interrupting their education, reducing future employment opportunities, and increasing the financial burden on their families. These findings suggest that economic vulnerability influences pregnancy decisions through both immediate financial constraints and concerns about long-term life opportunities. Conversely, strong financial and practical support from family members often enabled adolescents to continue their pregnancies despite limited personal resources.

Access to reliable reproductive health information and services also substantially shaped pregnancy outcome decisions. Most participants initially sought information through internet searches, social media platforms, or friends, whereas relatively few consulted healthcare professionals during the early stages of pregnancy recognition. Similar barriers to accessing professional reproductive health services have been reported by Koiwa et al and Griffin et al.[15,19] Reliance on informal information sources may expose adolescents to inaccurate or incomplete information, increase anxiety, delay pregnancy recognition, and postpone timely access to appropriate reproductive healthcare. This finding reflects persistent gaps in adolescent-friendly reproductive health services and highlights the need to strengthen confidential, accessible, and non-judgmental counseling services. Improving reproductive health literacy and expanding access to evidence-based information through schools, primary healthcare facilities, and digital health platforms may enable adolescents to make more informed and timely pregnancy decisions.

Overall, these findings demonstrate that community-level influences extend beyond the availability of health services and encompass the broader moral, economic, and informational environments in which adolescents make reproductive decisions. Addressing unintended adolescent pregnancy therefore requires comprehensive community-based interventions that integrate reproductive health education, financial and social support, culturally sensitive counseling, and equitable access to adolescent-friendly reproductive healthcare.

Societal-level influences

At the societal level, social stigma and cultural expectations emerged as powerful influences on adolescents' pregnancy outcome decisions. Many participants described fears of community judgment, gossip, discrimination, and damage to their own and their families' reputations following an unintended pregnancy. Consistent with previous qualitative studies, social stigma surrounding premarital pregnancy often generated feelings of shame, embarrassment, and psychological distress, which in some cases contributed to decisions to terminate the pregnancy.[16] However, our findings suggest that stigma extended beyond individual experiences and reflected broader societal attitudes toward adolescent sexuality, gender roles, and acceptable reproductive behavior. Adolescents were often concerned not only about their own futures but also about the potential social consequences for their parents and family members.

Cultural expectations regarding marriage, motherhood, and family honor further shaped pregnancy outcome decisions. Similar findings have been reported in other settings where social acceptance remains closely linked to marriage and conformity with prevailing cultural norms.[16] In Vietnam, premarital pregnancy is still widely perceived as inconsistent with traditional expectations regarding female sexuality and family values. Consequently, adolescents frequently evaluated their pregnancy decisions within the context of preserving family harmony, avoiding social criticism, and maintaining family reputation. These findings indicate that reproductive decision-making cannot be understood solely as an individual choice but rather as a process embedded within broader cultural and social structures.

An important finding of our study was the prominent role of family authority and collective decision-making. Unlike individualistic societies, where reproductive decisions are often viewed as matters of personal autonomy, Vietnamese adolescents commonly remained financially, emotionally, and socially dependent on their families. As a result, decisions regarding pregnancy continuation or termination were frequently negotiated collectively, with parents and other family members exerting considerable influence over the final outcome.

This finding reflects the collectivist orientation of Vietnamese society, in which family interests and social obligations often take precedence over individual preferences. While family involvement may provide valuable emotional and practical support, it may also limit adolescents' reproductive autonomy when parental expectations conflict with their personal wishes.

Taken together, these findings suggest that reducing unintended adolescent pregnancy requires interventions beyond the healthcare sector alone. Public health strategies should address stigma surrounding adolescent pregnancy, promote comprehensive sexuality education, and foster supportive social environments that respect adolescents' reproductive rights while acknowledging the important role of families within the Vietnamese cultural context.

Community engagement, school-based education, and public awareness campaigns may help reduce discrimination and create conditions that enable adolescents to make informed and autonomous reproductive decisions.

Implications for practice

Adolescent pregnancy outcome decisions are shaped by interacting influences across multiple ecological levels. Interventions should extend beyond individual counseling to include family-centered approaches, partner engagement, adolescent-friendly reproductive health services, and community efforts to reduce stigma. Strengthening comprehensive sexuality education and improving access to reliable reproductive health information may support informed reproductive decision-making among adolescents.

Strengths and limitations

A major strength of this study is the application of the social ecological model to examine influences across multiple levels of adolescents' social environments. However, the qualitative design, purposive sampling, and reliance on self-reported experiences may limit transferability and introduce recall or social desirability bias. In addition, findings from a single referral hospital may not reflect experiences in other regions of Vietnam.

CONCLUSION

Pregnancy outcome decisions among Vietnamese adolescents are shaped by interacting influences across individual, interpersonal, community, and societal levels. Family relationships, partner commitment, financial circumstances, access to reproductive health services, and sociocultural expectations all contribute to decision-making. Interventions should prioritize family-centered counseling, adolescent-friendly reproductive health services, improved access to accurate information, and stigma-reduction strategies to support informed reproductive decisions.

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