Fathers' Behavior in Providing Reproductive Health Information to Male Adolescents in Surakarta: A Qualitative Study

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ABSTRACT

Background: Adolescent males generally demonstrate a lesser understanding of reproductive health compared to their female peers. Paternal involvement is crucial in addressing this disparity, as fathers are perceived as facilitators of more comfortable same-gender interactions. This research employed the Theory of Planned Behaviour and the Health Belief Model to analyse fathers' roles in disseminating reproductive health information to male adolescents.

Method: A qualitative study was conducted in Surakarta between January and April 2025. Seventeen fathers of male adolescents, aged 10–19 years, served as the primary informants. They were selected via purposive sampling based on specific inclusion criteria: being married and having prior exposure to reproductive health materials. The exclusion criterion was non-local employment without a daily commute. Source triangulation involved an additional 17 wives and 19 adolescents. Data were collected through in-depth interviews and analysed using Colaizzi's method.

Result: The majority of fathers educated their children on reproductive health, indicating positive attitudes and an understanding of its significance for adolescents. Wives significantly influenced fathers' perceptions and communication regarding this topic. Time constraints emerged as a key issue, with fathers expressing willingness to participate when their teenagers were available. It was found that the simultaneous availability of fathers and teenagers was necessary to foster closeness and effective communication.

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INTRODUCTION

Adolescent males are a demographic group characterised by heightened curiosity, making them more susceptible to sexual and reproductive health issues. In Indonesia, 3.6% of males aged 15–19 years have engaged in premarital sexual activities, compared to 0.9% of females in the same age range.(1) This behaviour increases their susceptibility to sexually transmitted infections (STIs), including HIV/AIDS.(2,3)

The prevalence of HIV among Indonesian adolescents aged 15 to 19 years increased from 3.88% in 2022 to 5.53% in 2023.(4,5) The risk factors for HIV transmission in Indonesia in the first quarter of 2022 were mostly heterosexual (29%) and homosexual (29%). Risky sexual behavior is a risk factor for HIV transmission that needs to be addressed. Based on gender, the percentage of HIV cases in men is higher (62%), while in women it is 38%.(6)

As of March 2023, Central Java Province reported the fourth-highest number of HIV cases in Indonesia, with 50,689 diagnoses.(6) In 2023, adolescents aged 15 to 19 years constituted the fourth-largest affected group in Central Java, following individuals aged 25 to 49 years (64.5%), 20 to 24 years (15.5%), and those aged 50 years or older. Within the province, a higher proportion of males (4.72%) than females (4.68%) were diagnosed with HIV.(7)

Surakarta City, located within Central Java Province, experienced a significant increase in new HIV cases, rising from 100 in 2022 to 402 in 2023. In 2023, individuals aged 15 to 19 years accounted for 2.9% of all HIV diagnoses in Surakarta City, with males representing 74.16% of these cases.(9) Furthermore, the Setabelan Primary Health Care in Surakarta reported six instances of unplanned pregnancies in 2021.(10) Consequently, early

intervention measures for controlling HIV among adolescents are critically important. However, the financial allocation for such initiatives in 2019–2020 remained exceptionally low (<0.1%).(11) This highlights the necessity for increased community involvement, particularly from parents, in providing education. This imperative is further underscored by studies demonstrating that adolescents' HIV risk behaviours are influenced by peer pressure, compounded by a lack of adequate understanding regarding reproductive health and HIV prevention.(12,13) Knowledge is a crucial factor in HIV prevention, as individuals are more inclined to implement prophylactic measures when they are aware of their effectiveness.(14)

Male adolescents demonstrated less awareness of HIV/AIDS prevention strategies compared to their female counterparts (64% versus 74%, respectively). They also exhibited greater openness towards premarital sexual activity (5.4% versus 2.9% for females). This combination of limited reproductive health knowledge and higher-risk sexual behaviour underscores the critical need for targeted educational interventions within this demographic.(1) A primary objective within the Indonesian Ministry of Health's presidential mission framework is to enhance adolescent reproductive health.(15) However, efforts to improve reproductive health awareness among male adolescents face significant challenges, as evidenced by the exceedingly low percentage (1.3%) who discuss these issues with their fathers.(1)

Educating parents about reproductive health is one strategy to help prevent behaviours that increase the risk of HIV transmission. Research conducted in Jakarta has confirmed the efficacy of such interventions in improving adolescents' preventative behaviours.(16) Conversely, a study in Surakarta revealed that 52.67% of parents did not provide male adolescents with information on reproductive health.(17) Fathers, in particular, reported low confidence when discussing this topic.(18)

Despite a higher prevalence of HIV diagnoses in adolescent males, most current reproductive health interventions primarily target females. (19) Research indicates that adolescents are more receptive to learning from their same-sex parents. (20) While fathers have a crucial role in educating male adolescents about reproductive health, many do not fulfill this responsibility. Furthermore, a lack of physical closeness between fathers and sons may increase the likelihood of male adolescents engaging in premarital sexual activity. (21)

Contemporary studies on reproductive health communication have predominantly focused on mother-daughter dynamics.(22–24) A qualitative study in five Indonesian locations with the highest HIV incidence explored this topic among adolescent respondents.(25)

Numerous studies, including a qualitative investigation in South Tangerang, have examined maternal communication with sons, the existing literature remains insufficient.(26) In Surakarta, further qualitative research has been conducted on the communication skills of working mothers with both male and female adolescents.(27) A qualitative review and thematic synthesis of studies from Sub-Saharan Africa revealed that fathers have a limited capacity to effectively convey adolescent reproductive health information.(28) This finding highlights the need for further investigation into paternal communication regarding reproductive health matters with male adolescents. A systematic review and meta-analysis in Ethiopia identified adolescent knowledge, perceived importance of communication, sexual experience, gender, and openness to discussion as significant predictors of reproductive health communication.(29) Significantly, prior researches have not employed the Theory of Planned Behaviour (TPB) or the Health Belief Model (HBM) to examine behavioural determinants within this context.(29) These theoretical frameworks offer valuable insights into the stages of behavioural development and individual perceptions concerning reproductive communication.(30,31) Consequently, the objective of this study is to undertake a comprehensive examination of fathers' behaviours regarding the dissemination of reproductive health information to male adolescents, utilising these theoretical models as conceptual frameworks.

METHOD

This qualitative study employed phenomenological approach to examine behaviours in delivering reproductive health education to their adolescent sons in Surakarta. The study was conducted from January to April 2025, involving seventeen fathers of male adolescents aged 10 to 19 years as the primary participants. Participants were selected through purposive sampling, adhering to two main inclusion criteria: current residency in Surakarta and familiarity with reproductive health concepts. Fathers employed outside the city who did not return home daily were ineligible to participate.

The study utilised source triangulation, incorporating additional interviews with seventeen wives and nineteen unmarried male adolescents within the same age cohort. All triangulation informants adhered to stringent residential criteria: wives were required to permanently cohabit with both their husbands and adolescent children, while adolescent participants needed to reside full-time with both parents during the study period.

The research analyses fathers' behavior to inform male adolescents about reproductive health and four principal dimensions of the TPB framework: attitudes, subjective norms, motivation to comply, and perceived behavioural control. Attitudes indicate fathers' evaluations regarding the significance of reproductive health education for adolescent males. Subjective norms encompass fathers' perceptions of the attitudes of significant others regarding such education. Motivation to comply indicates the degree to which fathers are inclined to adhere to these prevailing opinions. Perceived behavioural control pertains to fathers' evaluations of their capacity to assume this educational responsibility.

The components of the HBM under examination include perceived benefits, perceived barriers, perceived susceptibility, and self-efficacy. Perceived benefits refer to fathers' evaluations of the merits of adolescent reproductive health education. Perceived barriers are what fathers perceive as obstacles to providing effective information. Perceived susceptibility gauges fathers' views on their sons' exposure to reproductive health risks. Self-efficacy is the belief fathers have in their ability to offer sound advice about reproductive health.

Data for this study was collected over a twomonth period through comprehensive interviews using an in-depth interview guide. All interviews were recorded on mobile devices and then transcribed verbatim. The research team meticulously examined and validated each transcript to ensure precision. Data analysis employed Colaizzi's phenomenological method, which involves repeatedly reading transcripts to gain a holistic understanding of the data, identifying and extracting significant statements, formulating meaningful interpretations, grouping meanings into thematic clusters, findings into a comprehensive synthesizing the description, explaining the basic structure of the phenomenon, and finally validating the research findings. Throughout this process, all team members collaborated to analyse and discuss the research data.(32) Data validation was accomplished via source triangulation, encompassing interviews with spouses and male adolescents. These individuals were selected due to their comprehensive understanding of paternal behaviours related to reproductive health communication with male adolescents. The UMS FHS Health Research Ethics Committee issued Standard Certificate Number Ethical 864/KEPK-FIK/II/2025, confirming the study's adherence to all ethical guidelines.

RESULT AND DISCUSSION

The study comprised 17 primary informants, all fathers of adolescent males, with ages ranging from 33 to 66 years. The participants exhibited diverse educational backgrounds: the majority had completed high school (n=10), followed by junior high school (n=3), primary school (n=2), and university (n=2). Most participants (n=14) were self-employed, while the remaining three were manual labourers.

To achieve source triangulation, the study incorporated 17 wives (aged 33-52 years) and 19 male adolescents (aged 10-19 years) as supplementary informants. This multi-perspective approach enhanced the validity of the research findings by facilitating thorough data verification.

Table 1. Characteristics of Key Informants

Informant	Age (year)	Sub-Districts	Level of Education	Occupation
Father 1	33	Pasar Kliwon	Bachelor	Entrepreneur
Father 2	48	Pasar Kliwon	Senior High School	Entrepreneur
Father 3	52	Pasar Kliwon	Senior High School	Entrepreneur
Father 4	41	Pasar Kliwon	Junior High School	Entrepreneur
Father 5	45	Jebres	Senior High School	Entrepreneur
Father 6	50	Jebres	Senior High School	Entrepreneur
Father 7	45	Serengan	Senior High School	Entrepreneur
Father 8	37	Serengan	Senior High School	Entrepreneur
Father 9	52	Serengan	Senior High School	Entrepreneur
Father 10	47	Banjarsari	Senior High School	Laborer
Father 11	44	Banjarsari	Senior High School	Entrepreneur
Father 12	58	Banjarsari	Senior High School	Entrepreneur
Father 13	53	Banjarsari	Elementary School	Unemployed
Father 14	52	Laweyan	Junior High School	Laborer
Father 15	40	Laweyan	Bachelor	Entrepreneur
Father 16	66	Laweyan	Elementary School	Entrepreneur
Father 17	45	Laweyan	Junior High School	Entrepreneur

Table 2. Characteristics of Triangulation Informants (Wives and Male Adolescents)

Triangulation	Age (year)	Sub-Districts	Level of Education	Occupation
Informant				<u> </u>
Wife 1	44	Pasar Kliwon	Senior High School	Entrepreneur
Wife 2	33	Pasar Kliwon	Senior High School	Housewife
Wife 3	40	Pasar Kliwon	Junior High School	Housewife
Wife 4	43	Pasar Kliwon	Bachelor	Laborer
Wife 5	49	Jebres	Bachelor	Entrepreneur
Wife 6	43	Jebres	Elementary School	Housewife
Wife 7	41	Serengan	Senior High School	Entrepreneur
Wife 8	43	Serengan	Senior High School	Entrepreneur
Wife 9	37	Serengan	Senior High School	Housewife
Wife 10	42	Banjarsari	Senior High School	Housewife
Wife 11	42	Banjarsari	Senior High School	Entrepreneur
Wife 12	47	Banjarsari	Junior High School	Housewife
Wife 13	52	Banjarsari	Junior High School	Housewife
Wife 14	52	Laweyan	Senior High School	Housewife
Wife 15	45	Laweyan	Bachelor	Entrepreneur
Wife 16	43	Laweyan	Senior High School	Entrepreneur
Wife 17	46	Laweyan	Elementary School	Housewife
Adolescent 1	17	Pasar Kliwon	Senior High School	-
Adolescent 2	14	Pasar Kliwon	Junior High School	-
Adolescent 3	17	Pasar Kliwon	Senior High School	-
Adolescent 4	11	Pasar Kliwon	Elementary School	-
Adolescent 5	18	Jebres	Senior High School	-
Adolescent 6	11	Jebres	Senior High School	-
Adolescent 7	14	Serengan	Elementary School	-
Adolescent 8	16	Serengan	Senior High School	-
Adolescent 9	19	Serengan	Senior High School	-
Adolescent 10	16	Serengan	Senior High School	-
Adolescent 11	10	Banjarsari	Elementary School	-
Adolescent 12	11	Banjarsari	Elementary School	-
Adolescent 13	16	Banjarsari	Senior High School	-
Adolescent 14	12	Banjarsari	Junior High School	-
Adolescent 15	18	Laweyan	Senior High School	-
Adolescent 16	14	Laweyan	Junior High School	-
Adolescent 17	18	Laweyan	Senior High School	-
Adolescent 18	13	Laweyan	Elementary School	-
Adolescent 19	11	Laweyan	Elementary School	-

Paternal Provision of Adolescent Reproductive Health Information

The findings indicate that the majority of participating fathers (n = 12) imparted information on reproductive health to their adolescent sons. Such discussions typically commenced during the early stages of the child's development and frequently took place in informal settings—during television viewing, after dinner, or during school breaks. The principal emphasis of these paternal conversations was genital hygiene. These results correspond with Ghanaian research, which identified adolescent physical development as the primary focus of parent–adolescent dialogue, with more sensitive topics often eschewed owing to prevailing social taboos and perceptions of adolescent immaturity.(33) Jordanian

studies reveal analogous concentrating patterns, predominantly on pubertal development and the prevention of sexual abuse.(34) His reserved approach to reproductive health discourse is common throughout many Asian cultures, where parents tend to eschew delicate subjects in favour of emphasising physical maturation and averting sexual violence.(35) In contrast, studies from various African contexts demonstrate that parental communication places greater weight on sexual abstinence education and the potential consequences of high-risk sexual behaviour, notably unintended pregnancy and sexually transmitted infections.(28) Fathers' communication with their adolescent sons lacks comprehensiveness: topics such as gender, sexual-violence prevention, and the consequences of risky behaviour

remain unaddressed.(36) A meta-analysis and systematic review indicate that comprehensive reproductive health education for adolescents is associated with a significant reduction in high-risk sexual behaviours among this population.(37,38)

"I started teaching my kids about reproductive health when they were old enough to understand. I talked to preschoolers only about basic rules—what they could and couldn't do. When they were about eight years old and had been circumcised, I explained the rules in greater detail. After this important event, I gave more detailed instructions on how to clean and care for the genitals. I keep the lines of communication open by talking to them casually and answering their questions as they arise. These talks most often take place in the evenings after dinner, when the atmosphere in the house is conducive to conversation." (Father 11, 44 years old)

Five fathers in the study reported that they had never provided reproductive health information to their adolescent sons. This gap stems principally from two factors: infrequent and insufficiently open communication between fathers and their teenagers. Fathers' work commitments significantly restrict their availability, thereby impeding these vital conversations. Research indicates that open, caring parent–adolescent dialogue substantially enhances adolescents' reproductive health knowledge.(27,39)

"I have not discussed this because I have a great deal of work. Our schedules never coincide: they are asleep when I leave in the morning and again when I return in the evening. There is simply no opportunity to talk. I still appreciate how important this information is and intend to address it soon." (Father 2, 48 years old)

Most participating wives reported that their husbands imparted reproductive health information to their adolescent sons, with a principal emphasis on post-circumcision genital hygiene. The choice of topics appeared to reflect prevailing social phenomena within their communities, including a declared intention to address the ramifications of early marriage, an increasingly prevalent practice locally.

"My husband and I instructed our sons on postcircumcision hygiene during the recovery period. These conversations were typically conducted during leisure hours through direct dialogue. In light of the rising incidence of early marriage, we plan subsequently to discuss its implications" (Wife 3, 40 years old) Most male adolescents in the study reported that their fathers provided direct instruction on reproductive health, typically beginning in primary school with guidance on genital hygiene.

"My parents began teaching me about personal hygiene when I was in primary school. They showed me how to maintain genital cleanliness, explained private bodily boundaries, and advised me on appropriate physical conduct. These discussions usually occurred informally." (Adolescent 14, 12 years old)

Conversely, five adolescents indicated that they had never discussed reproductive health with their fathers, citing infrequent contact.

"I have never received any information about reproductive health from my father because we seldom speak." (Adolescent 3, 17 years old)

Current findings suggest that paternal communication about reproductive health with adolescent sons necessitates enhancement, considering its vital function in fostering health awareness and disease prevention. Most of the fathers in this study attempted to provide such information, but their full participation was hindered by ongoing challenges, particularly time constraints and communication difficulties. This concurs with prior studies indicating that restricted opportunities for parent-adolescent interaction markedly diminish the delivery of reproductive health education.(40-42) In this sample, fathers' predominant occupational commitments substantially restricted opportunities for meaningful discourse. It is therefore imperative that parents prioritise such communications. Moreover, creating a supportive environment for dialogue may foster more open and effective discussions of reproductive health issues.

Paternal Attitudes Towards Adolescent Reproductive Health Communication

All participating fathers expressed favourable attitudes towards educating adolescents on reproductive health. They unanimously agreed that this information was crucial for male adolescents, as it could enhance their knowledge and self-care practices. Fathers also viewed the provision of reproductive health education as a shared parental responsibility, a perspective consistent with research from Nepal.(43)

Despite the potential for either parent to provide this information, fathers believed that same-gender

communication could foster greater comfort. This viewpoint aligns with current literature suggesting that male adolescents may be more inclined to discuss reproductive health with their fathers.(44) Nevertheless, practical limitations, particularly fathers' professional obligations, frequently necessitate maternal facilitation of these discussions.

Research from Jordan corroborates this trend, demonstrating that cultural norms often prescribe distinct communication pathways for boys and girls: fathers typically engage with sons, while mothers converse with daughters.(34) The present study similarly identified a collaborative parental strategy, whereby fathers support mothers when relaying specific reproductive health information to male adolescents.

"This education is essential for the long-term health outcomes of adolescents." I oppose the idea of treating people differently based on their gender because the main benefits—better health and more knowledge—are the same for everyone. There is no downside to giving this kind of information, and it is very useful for learning." (Father 3, 52 years old)

Triangulated data from wives corroborated unanimous paternal acknowledgement of the significance of adolescent reproductive health education. Mothers were considered the main educators, but fathers were consistently viewed as supplementary support when needed. This distribution of roles reflects cultural expectations while maintaining an avenue for paternal involvement.

Qualitative data from one wife demonstrated this dynamic: "These discussions are especially beneficial when dealing with delicate subjects such as nocturnal emissions and related physiological alterations. Religious teachings provide us with basic guidance, but we add more context to help. When teenagers ask questions spontaneously, we provide immediate answers. Mothers usually handle the initial resistance, and fathers only get involved when challenges become significant because fathers are perceived as more assertive, and teenagers are sometimes hesitant. This remains largely a shared parental responsibility." (Wife 17, 40 years old)

Five male adolescent participants similarly underscored the educational significance for health preservation and risk mitigation, especially concerning substance use and premarital sexual conduct. The account

of one participant illustrated the developmental trajectory of this education:

"Reproductive health goes beyond personal health to include social interactions, such as romantic relationships, where boundaries must be respected. Our religious curriculum offers a systematic educational framework: foundational instruction occurs in primary year 6, prior to the onset of puberty, followed by comprehensive elaborations in year 9, subsequent to puberty's initiation, and continued reinforcement throughout secondary education." (Adolescent 17, 18 years old)

The study's results showed that parents agreed that mothers should be the primary caregivers and that fathers should provide important support. This corresponds with research from Kuala Lumpur that highlights the primary roles of mothers and the frequent noninvolvement of fathers, (45) while emphasising the essential distinction that participants in this study supported authentically shared responsibility. The advantages of increased demonstrated paternal involvement in adolescent reproductive health education necessitate specific emphasis.(46) The recognised paternal acknowledgement of this education's significance is substantiated by robust empirical evidence. Strong evidence shows that it works in many ways: it raises awareness of health issues among teenagers, helps them understand how their bodies are changing, helps them make healthier choices, and encourages them to use health services correctly.(47–49)

Subjective Norms

Findings revealed that fathers' perceptions of reproductive health education for adolescent males were substantially influenced by their wives' views. Most fathers regarded their wives as more reliable sources of information, attributing to them superior expertise in matters of adolescent reproductive health. This aligns with research from Nepal, which demonstrated that mothers possessed more comprehensive knowledge than fathers concerning adolescent development and pubertal markers.(43) Consequently, the fathers in this study frequently deferred to their wives, thereby encouraging their sons to seek accurate information from them. This dynamic reinforces the maternal role in conveying reproductive health knowledge to adolescents, a role further entrenched by prevailing sociocultural norms. For example, in Javanese communities, mothers customarily assume primary responsibility for educating their children

about reproductive health, to a greater extent than fathers.(50)

"As head of the family, I believe my wife and I must reach consensus on all decisions. I cannot decide on my own; my wife must be involved." (Father 13, 53 years old)

Furthermore, some fathers maintained that their perspectives derived chiefly from personal experience rather than external influences. Individuals' views differed according to their upbringing, their relationships with their parents, and any prior encounters with reproductive health matters. Such experiences heightened their appreciation of the need for open dialogue with their adolescents on these topics.

"From my own experience, I depend on no one. While I occasionally seek my wife's counsel, I make most decisions independently and address any misbehaviour by my child without delay." (Father 17, 45 years old)

Most wives concurred with these findings, noting that their husbands typically sought their counsel first when addressing reproductive health issues with their adolescent sons. This collaborative approach ensures that the information conveyed is both consistent and accurate. Wives also observed that their husbands' perspectives often derived from personal experience, thereby shaping their understanding of health matters, including reproductive health.

"My husband relies on me to convey this information. He usually discusses it with me initially and then draws upon his own experiences regarding reproductive health." (Wife 15, 45 years old)

Likewise, the male adolescents reported that their mothers frequently served as their principal confidantes in matters of reproductive health education. They regarded their mothers as more knowledgeable and accessible, which facilitated frank discussions on the topic. This maternal openness has been shown to markedly enhance parent–adolescent communication regarding reproductive health.(51) Though both parents play essential roles in educating their children about reproductive health, maternal endorsement of paternal decisions supports adolescents' learning and comprehension of these issues.

Motivation to Comply

Fathers in this study demonstrated a pronounced proclivity to defer to individuals they regarded as

influential, especially those perceived to possess superior experience or expertise in reproductive-health decision-making. This tendency was further reinforced through spousal dialogue, where effective communication between husband and wife yielded more robust, mutually endorsed decisions. Fathers maintained that collaborative decision-making not only fostered family cohesion but also ensured that adolescents received reliable and consistent information.

"As head of the household, I deem it essential to confer with my wife prior to making decisions, as I cannot—and ought not to—decide unilaterally." (Father 13, 53 years old)

A parallel trend emerged among mothers, who reported that their husbands typically deferred to opinions they esteemed, particularly in matters of adolescent reproductive-health education. In numerous instances, mothers assumed the initiative in prompting their husbands to engage their sons in such discussions, thereby underscoring the critical importance of open family communication on health matters.

"I frequently encourage my husband to share accurate information with adolescents, recognising that inadequate communication between spouses can severely compromise their understanding." (Wife 14, 52 years old)

Effective collaboration and open dialogue between spouses are therefore indispensable in decision-making, particularly with regard to adolescents' reproductive health and knowledge acquisition.(52) By valuing and integrating both parents' perspectives, families foster an environment that optimally supports their children's development.

Perceived Behavior Control

The majority of fathers believe they possess sufficient self-control to consistently impart information regarding reproductive health to their male adolescent children. This endeavour is significantly facilitated by the support they receive from their wives and teenagers in the dissemination of this information, alongside a profound sense of parental responsibility. Such support is crucial in enabling fathers to share vital information effectively, thereby ensuring adolescents receive accurate guidance at an appropriate juncture. Furthermore, fathers' confidence in their ability to continue providing reproductive health information stems from a perception of their knowledge and competence in this area.

"I feel capable of undertaking this. If one allows their child to take the lead, guidance can typically be offered. My extensive professional and personal experience instills in me the confidence to provide information to teenagers. When offering advice to adolescents, it is optimal to do so when emotions are not a hindrance, thereby maintaining a neutral atmosphere. Otherwise, the outcomes may prove unsatisfactory. I believe this process is relatively straightforward if my wife and teenagers cooperate." (Father 13, 53 years old)

Conversely, a minority of fathers express reservations regarding their capacity to sustain this role. These fathers encounter difficulties in consistently providing reproductive health information to their adolescent sons, primarily due to demanding work schedules that limit opportunities for frequent dialogue. Consequently, the occasions for sharing crucial information are curtailed.(53)

"Insufficient, as I do not communicate extensively and I am preoccupied with work." (Father 3, 52 years old)
"I only have two hours available to meet with my teenagers, hence my time is limited." (Father 15, 40 years old)

Concurring with this perspective, all mothers interviewed also affirmed their husbands' capacity for self-control in consistently providing male adolescents with reproductive health information. Mothers consider robust mutual support and collaboration as instrumental in ensuring that male adolescents receive accurate and beneficial information. This view is further corroborated by the demonstrable openness of the male adolescents themselves, which alleviates any potential discomfort parents might experience when discussing reproductive health with them.

"Indeed, my husband's effectiveness derives from our extensive dialogue. Our child is likewise willing to discuss any concerns, enabling us to resolve issues collaboratively. We adopt neither an excessively strict nor an unduly permissive stance, which facilitates effective information-sharing. Although my husband often offers sound advice, he continues to smoke, so I find it necessary to remind him more frequently." (Wife 13, 53 years old)

Male adolescent also emphasised that their fathers must exercise self-control in order to continue providing reliable reproductive health information. Moreover, they indicated that their fathers determine the appropriate timing and manner for initiating discussions on these matters.

"My father can manage this. If I speak to him regularly about reproductive-health issues, he will give me accurate information." (Adolescent 13, 16 years old)

This study demonstrates that transparency and encouragement from all family members, including wives and adolescents, are crucial in facilitating reproductive health communication from fathers to male adolescents. Robust family support is identified as a key factor in enhancing parental efficacy in this domain. Despite potential challenges, open communication and collaborative family efforts can foster a supportive environment conducive to adolescents' learning about important reproductive health issues.

Benefits Perception

Most fathers in this study maintained that comprehensive reproductive-health education would furnish adolescents with the discretion necessary to eschew risky sexual behaviours. They further contended that such knowledge empowers young people to make better-informed and more responsible decisions when faced with social pressures concerning sexual health.

As one father (aged 52, with a 14-year-old son) remarked, "Whilst the benefits are manifold, the principal advantage lies in adolescents' enhanced self-regulation, thereby reducing the likelihood of promiscuous behaviour."

According to the wives' perspectives, equipping husbands with accurate information enables them to instruct adolescents regarding the risks and consequences of inappropriate behaviour.

"My husband perceives numerous advantages. As our son approaches adulthood, his awareness increases; however, I cannot predict how their relationship will evolve in the future." (Wife 9, 37 years old)

"The principal benefit is that the adolescent can maintain reproductive health, proper nutrition, and hygiene. If teenagers feel too embarrassed to discuss these matters with their parents, their cognitive development may be affected. Therefore, parents must provide information to adolescents gradually and with due sensitivity." (Wife 11, 42 years old)

Concurrently, male adolescents who had received reproductive health information from their fathers reported favourable views. They indicated that such guidance enhanced their knowledge and capacity for self-care in matters of reproductive health. Moreover, these adolescents felt more comfortable discussing health issues with their parents, thereby strengthening familial relationships and communication.

"This information assists young people in understanding themselves better and in taking greater care of their health." (Adolescent 4, 11 years old)

In summary, parental provision of reproductive health information, particularly by fathers, exerted a markedly positive influence on adolescents' comprehension and attitudes towards these topics.(55) With accurate information, adolescents not only deepen their understanding of personal health but also develop strategies for navigating social challenges.

Perception of Barriers

Many fathers perceive that the dissemination of reproductive health information is often hindered by inadequate communication with their adolescent children. They report that adolescents frequently exhibit reluctance to engage in discussions on this sensitive topic, resulting in interactions that are limited and neutral in tone. This absence of clear and comprehensive information regarding reproductive health may contribute to behavioural deviations, particularly in the context of the current social media era. (49) Adolescents are often perceived as displaying oppositional attitudes when confronted with such information, highlighting the importance of parents conveying knowledge in an appropriate manner and at opportune moments to support adolescents' understanding and awareness.

"Parents rarely have opportunities to meet with their adolescents. Moreover, adolescents often feel embarrassed to discuss matters of this nature." (Father 3, 52 years old) "Adolescents sometimes respond with rebellious attitudes when addressed. Therefore, information should be delivered according to their needs and during appropriate moments of interaction." (Father 17, 40 years old)

Both fathers and male adolescents identify infrequent interaction and limited opportunities for regular meetings as primary impediments to the effective dissemination of reproductive health information. These

constraints hinder open dialogue on sensitive subjects, consequently impeding the sharing of crucial information.

"The barrier comes from the fact that we don't see our fathers very often, so when we do talk to them, we sometimes feel embarrassed." (Adolescent 3, 11 years old)

The findings of this study underscore the essential role of transparent communication between parents and adolescents in the transmission of reproductive health information. Parents can facilitate adolescents' comprehension of sensitive topics by fostering open dialogue and cultivating a safe environment for such discussions within the home. Nonetheless, this objective cannot be fully achieved unless fathers allocate adequate time to interact with their adolescent sons. The resultant lack of interaction not only harms the father-son relationship but also diminishes adolescents' propensity to confide in their fathers about their concerns.(56) Fathers must, therefore, prioritise dedicating time to engage in conversation with their adolescent sons.

Perception of Susceptibility

Most fathers perceive adolescent males as especially vulnerable in matters of reproductive health. Although contemporary adolescents are adept at sourcing information online, parental guidance remains indispensable to ensure its accuracy. In the absence of sufficient parent–adolescent dialogue, young people may make independent choices that compromise their reproductive well-being.(57)

"While no significant issues have arisen, it is preferable to provide adolescents with information to increase their vigilance. Nowadays, adolescents possess a degree of independence through technology, such as the internet. As a parent, I endeavour to follow sound guidance, and my son has never exhibited rebellious behaviour. However, I am concerned that, without appropriate information, he may engage in behaviours such as remaining awake late at night, thereby compromising his sleep patterns." (Father 13, 52 years old)

A triangulation informant, one husband's spouse, echoed her husband's perspective and reiterated the particular susceptibility of adolescent males:

"The impact can be substantial, as vulnerable adolescents may encounter numerous problems. Therefore, we must furnish them with information to promote better health and understanding." (Wife 1, 44 years old)

This study's findings underscore the pivotal role of parents in disseminating accurate reproductive health information and fostering transparent communication. Such an approach empowers adolescents to appraise potential risks and make informed choices regarding their well-being. Moreover, targeted health-promotion programmes can reinforce these efforts by delivering reliable information directly to young people. Optimal programmes should engage fathers in discussions of their sons' reproductive anatomy and physiology; in strategies for maintaining reproductive health; in awareness of risky sexual behaviours and their consequences; in principles of family planning; in self-protection and refusal skills; and age-appropriate media literacy concerning sexual content. These recommendations are consonant with Indonesian policy, specifically Minister of Health Regulation No. 2 of 2025, which mandates the provision of information, communication, and education to parents as part of national reproductive health improvement efforts.(58)

Self-Efficacy in Providing Reproductive Health Information

Most fathers report considerable confidence in their capacity to inform their adolescent sons about reproductive health, particularly during periods of leisure. They recognise the pivotal role of parental guidance in enabling their sons to make informed, prudent choices. Moreover, fathers stress their duty to verify the accuracy and reliability of the information they impart. Accordingly, they monitor their sons' social environments, identifying peer groups where smoking or alcohol consumption may occur, and endeavour to provide sound advice to counteract adverse influences. In their role as heads of household, fathers appreciate that their responsibilities extend beyond material provision to encompass both moral instruction and educational support.

"I believe I can effectively provide adolescents with reproductive-health information, especially when they have leisure time, so that they exercise greater caution. As a parent, I consider it essential to offer correct guidance to prevent mistakes. My son does not smoke with his friends, although some of them do. I also hope he returns home safely when he is in the company of friends who drink. In addition, I prepare financially, build our home, and plan for his future marriage." (Father 13, 53 years old)

A triangulation informant, one participant's wife, corroborated her husband's self-assessment and attributed his efficacy to their children's compliant disposition:

"My husband feels capable because our adolescents are obedient. When they go out late, sometimes until midnight, I often relay to them pertinent information from television broadcasts that they ought to know."

The study's findings demonstrate that parents are acutely aware of the importance of delivering reproductive health information and equipping adolescents for forthcoming challenges. Allocating dedicated time for father-son dialogue emerges as a critical determinant of paternal self-efficacy in discussing reproductive health. Conversely, limited interaction, owing to fathers' unavailability and adolescents' busy schedules, hinders open communication, despite leisure time being recognised as a key enabler of paternal instruction.(59) A notable limitation of this study is its restricted generalisability. Consequently, further research is required to identify the precise factors that influence fathers' engagement in disseminating reproductive-health information.

CONCLUSION

The majority of fathers have provided their adolescent sons with sexual health information; however, the content predominantly focuses on reproductive anatomy and hygiene. Fathers generally hold a positive view of reproductive health education for adolescent males, stemming from the belief that it can mitigate premarital sexual activity and empower them to make informed health decisions. The perspectives of most fathers regarding reproductive health education are significantly influenced by their wives, whose opinions they typically endorse. Fathers perceive adolescents as being more susceptible to reproductive health issues if they lack adequate information. While fathers believe they can impart reproductive health information to adolescents with family support, the limited shared time between fathers and adolescent sons at home poses a significant barrier to discussing this topic. This situation can lead to a reduced willingness among adolescents to openly communicate about reproductive health with their fathers. Consequently, fathers need to strategically schedule activities with adolescent males to create opportunities for engagement and discussion regarding reproductive health concerns. There is a clear imperative for educational programmes targeting parents in general, and fathers specifically, to underscore their crucial role in providing reproductive health information to adolescents and to equip them with effective delivery methods. Primary healthcare providers and local village officials could establish collaborative initiatives to furnish fathers of male

adolescents with information, education, and communication strategies.

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Conflict of Interest

No potential conflicts of interest relevant to this article were reported

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