

EXPLORING FAMILY COMMUNICATION PATTERNS IN ADOLESCENTS AND THEIR ASSOCIATIONS WITH REPRODUCTIVE AND SEXUAL HEALTH: A SYSTEMATIC REVIEW

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ABSTRACT

Adolescents are a group that is particularly susceptible to challenges and obstacles, such as problems with their reproductive and sexual health. Teens' views, knowledge, and behavior are greatly influenced by the ways in which parents and teens communicate with each other at home. The purpose of this study is to investigate how parents and teenagers communicate about sexual and reproductive health, as well as any barriers. A systematic review of the literature was the research approach and methodology employed. Using the PRISMA approach, journals published between 2004 and 2024 were gathered from the DOAJ, PubMed, The Lancet, and ResearchGate databases. The examination of twenty-five chosen publications led to the classification of parent-adolescent communication patterns into three primary domains: sociodemographic circumstances, communication subjects, and communication topics. Communication is hampered by a variety of factors, such as shame, discordant relationships, parental worries, ignorance, and poor communication skills. Parents, teenagers, and other family members all have a role to play in helping families establish effective communication patterns. Effective strategies to promote reproductive health communication within the family include making accurate information easily accessible, involving not only parents but also carers who look after the adolescent, and developing community-based, religiously-based, and culturally-based programs.

Keywords: adolescents; family communication; reproductive and sexual health.

INTRODUCTION

Adolescents are a group that is vulnerable to a variety of hazards and challenges, including problems with their sexual and reproductive health (SRH). This is exacerbated by the problem of risky and aberrant behaviours, including the use of illegal drugs, alcohol, and tobacco. The 2017 Indonesian Demographic and Health Survey (SDKI) found that 2% of female youths and 8% of male youths aged 15 to 24 reported engaging in extramarital sex. If the issue is not taken seriously, this disease could expose our young people to risk factors such as early marriage, unplanned pregnancies (KTD), HIV infection, and AIDS. Adolescents and sexual reproductive health issues are like having two sides of a single coin in this digital age of technology, where all kinds of information can readily enter and become problematic. It may be helpful if utilized properly, and vice versa, it may make problems worse.

The government has created policies, launched nationwide campaigns, and implemented several public health-based intervention initiatives in an attempt to address and prevent reproductive health issues in teenagers. However, in the framework of the family, exposure to reproductive and sexual health knowledge needs to be developed from the beginning, beginning with the family. Teens' attitudes, knowledge, and behaviour are greatly influenced by the communication patterns that parents and teenagers have. According to a study by Wirawan et al. (2022) found

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that 55.2% of teens are more likely to discuss sex with their friends than with their family members.

Adolescents who have honest and supportive family communication can receive emotional support, correct information, and a good perspective on their reproductive and sexual health. Conversely, ineffective or closed communication methods can lead to knowledge gaps, discomfort when discussing reproductive and sexual health issues, and misconceptions or unequal understandings of these issues. This obviously goes against the original intent of the eight family roles, especially the tasks of protection, socialization, and education.

It is envisaged that learning more about the elements that support and impede family communication as well as how they affect teenage reproductive and sexual health, would strengthen the foundation for successful prevention and intervention initiatives in society. In addition, this study looks at topics, ideas, and features that haven't gotten much attention—particularly concerning the circumstances surrounding communication between teenagers and parents in Indonesia.

Identifying the dynamics and communication patterns within the family on how parents and teenagers communicate about reproductive and sexual health was the goal of this study in the context of policy impact. Because of this, the study will be able to be used as a guide for the best ways for families to communicate, especially when it comes to dealing with teenage reproductive health issues. Additionally, the study will offer recommendations to the National Population and Family Planning Board (BKKBN), which is the responsible institution for this matter.

METHOD

A systematic literature review methodology is used in this study. This method section will explain the literature source search approach, including how to apply inclusion and exclusion criteria, choose sources, extract data, and employ search phrases that enable identifying the particular conversation themes targeted.

Literature Search Strategies

The literature search was done in April 2024, to compile scientific articles from both national and international journals from 2004 to 2024 through electronic databases. Using the keywords [family communication AND adolescent], [family interaction OR family communication AND adolescent AND sexual reproductive health], [family communication AND adolescent AND sexual reproductive health] in PubMed search engine, [family communication AND adolescent AND sexual reproductive health] in The Lancet, and "parent-child communication" AND sexual reproductive health in ResearchGate. With a total of 1511 scientific papers, the results of these search engines yielded 570 items indexed in DOAJ, 584 articles indexed in PubMed, 257 articles indexed in The Lancet, and 100 articles indexed in ResearchGate. The Mendeley program was then used to import all of the literature and help in writing, organizing references, and producing citations for this investigation.

Inclusion and Exclusion Criteria

The following inclusion and exclusion criteria were used in narrowing down the papers selected for the review: (1) journal articles discussing the practice of communication patterns in families regarding sexual and reproductive health for adolescents; (2) the journal's subjects are teenagers and/ or parents; (3) journal articles from national and international journals published between 2004 and 2024 (20 years); (4) journal articles in English or Indonesian; and (5) There is a full text available, and the journal is an original work rather than a research review.

Concurrently, the exclusion criteria that we utilize consist of: 1) papers that lack relevance to the research aims; 2) studies involving participants other than parents and/or teenagers; 3) publications with unsuitable time frames; 4) articles written neither in English nor Indonesian;

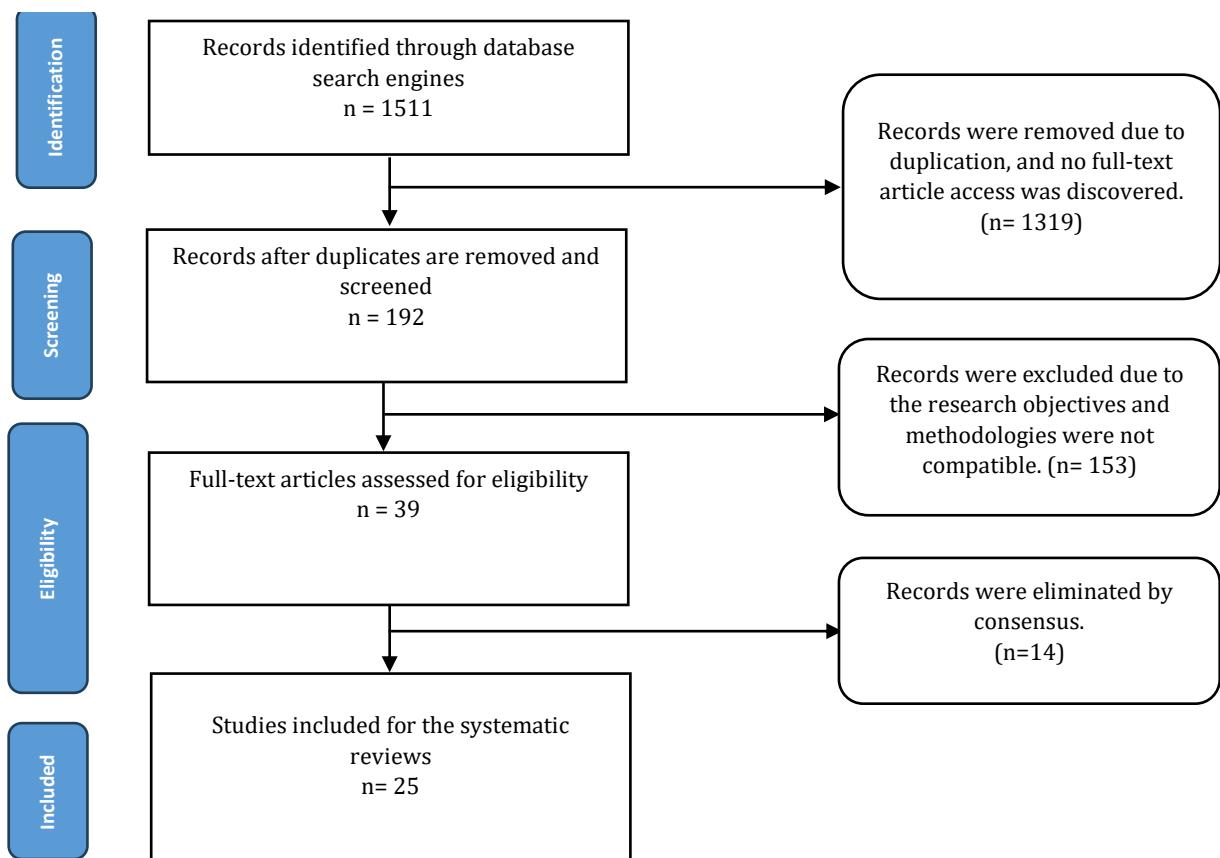
5) kinds of papers that fall under the grey literature category (theses, books, conferences, dissertations, and literature reviews); and 6) the lack of full-text availability.

Literature Selection Process

The PRISMA approach, or Preferred Reporting Items for Systematic Reviews and Meta-Analysis, was used to identify the literature (Moher et al., 2009). 1511 articles were found from the first search. The selection process was then completed in collaboration with the research team for this study, which involved vetting the entire text, abstract, and study title for possible inclusion in the review. Based on the screening results, 1319 articles were eliminated because the title and abstract did not align with the study objectives, the article was not fully found, or there was duplicate content from the different search sources indicated before.

In addition, the author used inclusion and exclusion criteria for choosing the papers. Preliminary studies, validation studies, stand-alone abstracts, commentary, case reports, book chapters, opinion pieces, conference papers, and articles written in languages other than Indonesian and English are not included. To harmonize perspectives and improve understanding, both researchers concurrently examined and selected every article through a series of discussions. As a result, both writers of the final papers that are pertinent to the study's goals and methodology reached a consensus before making the final choice. Figure 1 below illustrates the process of searching and selecting literature.

Figure 1 PRISMA Flow Diagram shows the review article selection process.



Source: Researcher's Collection, 2024.

Data Extraction

Data extraction was done concerning the following subjects: author, publication year, nation where research was done, research focus, sample size and characteristics, research design or methodologies employed, and each study's outcomes. Scholars evaluate every paper for quality and classify all the study information according to the previously stated standards. This procedure aids in comprehending the general methodology employed by earlier researchers. Table 1 below is the author's presentation of the extraction results.

Table 1 Details of Studies included in the Systematic Review.

Num	Authors, Year, Country	Focus	Participant/ Sample Characteristics	Study Design	Result
1	Zakariya et al. (2019) Bangladesh	Exploration of communication between mothers and teenage girls about reproductive health	1174 girls aged 13-19 years	Quantitative, Cross-sectional Study	Compared to girls from other religions, Hindu girls talk about reproductive health more frequently and are more knowledgeable about it. Mother and kid feel comfortable talking about sexual and reproductive health because of their strong relationship. >80% of respondents discussed menstruation-related topics related to reproductive health communication. Factors impeding communication: sociocultural.
2	Mihretie et al. (2021) Ethiopia	Factors related to parent-child communication about reproductive health	1640 Female Students	Quantitative, Cross-sectional Study	Girls discuss reproductive health with their parents in 37.5% of cases. Information about reproductive health services, place of residence, education level, and whether or not they have had sex are all factors that affect parent-child communication regarding reproductive health.
3	Mataraarachchi et al (2023) Srilangka	Mother and child communication about Reproductive and Sexual Health	810 girls aged 14-19 years	Quantitative, Cross-sectional Study	In order to talk about SRH with their mothers, 78.2% of the girls brought up less delicate subjects. 88% of the participants discussed menstruation, and 94% discussed self-care. Cultural differences, apprehension over the mother's response, the mother's lack of confidence,
4	Gautam et al. (2021) Nepal	Parent-child communication about Reproductive and Sexual Health	212 students aged 15-19 years	Quantitative, Cross-sectional Study	Out of all children, 75.9% talk to their parents about SRH; 24.1% never do, 47.2% seldom do, 23.6% occasionally do, and 5.2% frequently do. Children speak SRH with their mothers in 62.37% of cases. The degree of understanding about SRH and the closeness of the parent-child relationship are influencing factors.
5	Wondimhunegn, et al, (2021) Eithiopia	Identifying the reasons behind the lack of reproductive communication between parents and adolescents	Completed structured questionnaires on 1000 parents of teenagers and conducted FGDs and in-depth interviews with 25 parents from different backgrounds.	Mixed-method	In this survey, the percentage of parents and teenagers who communicated was remained quite low at 11.4%. Place of residence (AOR=2.1 95%CI 1.15,9.34), gender (AOR=2.4,95% CI2.11,4.33), knowledge (AOR =3.8, 95% CI2.7,6.34), attitude (AOR=2.2, 95% CI 1.44,4.32), mother's educational status (AOR=2.4, 95% CI 1.23, 4.12), number of children (AOR=3.95% CI 2.6,4.74), and age (AOR=3.22,95%CI 2.8, 4.9) are statistically significant factors that affect parent-adolescent communication.
6	Maina et al. (2020) Kenya	Exploring patterns and content of parent-child communication about reproductive health	32 parents and 30 teenage boys and girls aged 11 and 13 years	Qualitative Study	Communication styles are influenced by gender differences. Teenage girls talk to their parents more frequently than teenage boys do. Four strategies were employed by parents: including others, fear-based communication, supporting communication, and no communication at all. Teenagers hide their romantic connections because older individuals don't think dating is acceptable.

Num	Authors, Year, Country	Focus	Participant/ Sample Characteristics	Study Design	Result
7	Randolph et al. (2017) USA	Exploring what are perceived as facilitators and barriers to father-daughter communication about sexual health. analyzed using content analysis.	FGD with 29 African American fathers who have sons aged 10-15	Qualitative, Content analysis	Three things help fathers and sons communicate: (a) the father accepts his role and responsibilities; (b) the father and child have a good relationship; and (c) the father is able to have a straight conversation with his son regarding sex. Due to three factors: (a) fathers' inability to start conversations with their sons about sexual health; (b) sons' developmental preparedness to learn about sexual health; and (c) fathers' lack of prior experience discussing sex with their fathers.
8	Ogle et al. (2008) UK	Identifying the relative level of comfort and discomfort in carrying out reproductive health communication between parents and children. (discusses six sexual health topics)	Completed questionnaires independently for 317 students and 575 parents.	Quantitative, Cross-sectional Study	There are barriers in communicating sexual health issues between parents and their children. And in this study, discomfort in reproductive communication seemed to be caused more by the children's reluctance to open up to communicate than by their parents.
9	Adzovie and Adzovie (2020) Ghana	Parent-child communication patterns and their effects on SRH	300 children aged 13-19 years	Descriptive Research	Many parents are unable to teach SRH to their kids. The formal education of parents affects their capacity to advise SRH. Two patterns of communication exist: both concept- and social-oriented.
10	Vongsavanh et al. (2020) Lao PDR	Factors influencing SRH communication between upper secondary students and their parents	384 Students aged 14-17 years	Quantitative, Cross-sectional Study	Of the respondents, 21.3% spoke with their parents about SRH. Gender, school location in an urban region, father's level of maturity, and accessibility to SRH knowledge are all factors that affect SRH communication. Seventy-eight percent of the remaining pupils hold a good opinion and believe that parent-child communication regarding SRH is crucial. Health facilities are the primary information source for SRH since they offer high-quality SRH information.
11	Al Zaabi et al. (2021) Oman	Basic data and information regarding parental barriers in communicating about reproductive and sexual health among adolescents.	FGD and in-depth interviews with parents of 15 people. The second stage, filling out the questionnaire by 250 samples of parents.	Mixed-method	Things that hinder parents from communicating with their children about reproductive and sexual health include: fear that such discussions could encourage children to initiate sexual intercourse earlier; feelings of embarrassment, discomfort; taboos related to related socio-cultural values; gender mismatch; and lack of knowledge about reproductive and sexual matters.
12	Pariera (2016) USA	Exploring the things that are the driving factors for conversations about reproductive and sexual health between parents and their teenage children, as well as the factors that hinder money, causing conversations about sexual matters to be rare.	The survey was conducted on a sample of 186 male and female parents. (N=186)	Quantitative, descriptive and multivariate analysis	The largest barrier that prevents parents from talking to their kids about SRH is their own belief that their kids are still too young to talk about sexual education. However, as time passes and parents forget that their kids are growing older, they believe that kids in this age range start to have trouble listening to their parents.
13	Connor et al. (2023) Australia	Exploring the sense of trust or confidence that teenage boys have in their fathers, especially in relation to making them fathers as a source of information about sexual and reproductive health.	Using secondary data from the 6th National Survey of Australian Secondary Students and the Sexual Health Survey	Quantitative, descriptive and multivariate analysis	In comparison to female students and transgender students, male students were more likely to use their fathers as a source of sexual health knowledge because they felt more comfortable asking them for assistance on sexual health and because they trusted the information more.

Num	Authors, Year, Country	Focus	Participant/ Sample Characteristics	Study Design	Result
14	Asampong et al. (2013) Ghana	Exploring parents' and adolescents' perceptions of the best time to initiate sexual behavior and communication about reproductive and sexual health.	FGD and in-depth interviews with 12 informants from two communities in Southeastern Ghana (Somanya and Adidome)	Qualitative, Thematic analysis	While informants were in agreement that parents should be the ones to communicate SRH to teenagers, they differed in their views regarding the implementation of SRH. Lack of role models, taboo, fear, and exposure to technology are barriers that prevent parents and teenagers from talking about SRH.
15	Ismail and Hamid (2016) Malaysia	Knowing teenagers' perceptions about SRH communication with parents	504 respondents from urban, semi-urban and rural school locations (60 schools)	Quantitative, HARBQ Survey	Between 76% and 90% of participants said they seldom or never speak with their parents. The majority of respondents think that SRH communication with parents is vital and that there is no shame involved as long as the parent's response is favourable. It is considered unpleasant in conservative Malaysian cultures to discuss SRH, or sensitive themes, taboos, religion, and generational disparities.
16	Othman et al. (2020) Yordania	Exploring how parents discuss SRH with their children	20 parents of teenagers aged 15-19 years (Parents of Jordanian and Syrian nationality) living in the cities of Amman, Arqa, Irbid, and Marfaq	Qualitative, Thematic analysis, FGD	Parents want to break the culture of shame about discussing SRH with their children. There are three strategies: Gender conformity, mother as a safe place, and seeking help from others which includes subthemes: seeking help from relatives and relying on the delivery of SRH information at school. Communication topics include puberty and sexual crimes.
17	Kisaakye et al. (2022) Uganda	Identifying factors related to parent-child communication about SRH	600 children aged 15-19 years	Quantitative, Cross Sectional Survey	61% of families communicate SRH, and this is more common in metropolitan areas, among Catholic households with devices. Compared to female respondents, men respondents speak with parents about SRH more frequently. The taboo stigma that still surrounds discussing this topic in society is a difficulty to SRH communication.
18	Grossman et al. (2019) USA	To see the relationship between adolescent sexual risk behavior and communication patterns with the extended family includes sexual discussion about: method protection, sexual risks and a relational approach to sex, which is defined as talking about sex in close relationships.	Survey of 952 teenagers in grades 11 and 12	Quantitative, Cross Sectional Survey	Communication discussing protection and risk was found to be a significant determinant of the number of sexual partners reported by adolescents.
19	Achen et al. (2022) Uganda	Understanding gender norms and expectations for parent-child communication about SRH	Community stakeholder engagement meetings (n = 2), in-depth interviews (n = 12), and three focuses group discussion (FGD) with parents (n = 18). This research involved the main caregivers of teenagers 10-14 years (biological parents, step-	community-based participatory approach	Sociocultural factors like media influences, religion, and cultural gender norms influence how parents and kids communicate in SRH. The obstacles to SRH communication include socioeconomic status, ignorance, and the influence of peers and education.

Num	Authors, Year, Country	Focus	Participant/ Sample Characteristics	Study Design	Result
			parents, grandparents, uncles and aunts)		
20	Grossman et al. (2018) USA	Investigating how family communication about reproductive and sexual health changes as adolescents develop from early adolescence to late adolescence.	Longitudinal qualitative research with interviews with 23 parents in two different periods, the first when the children were still in their early teens, and the second when the children were transitioning into late teens.	Qualitative, Longitudinal Study	As their children approach puberty, parents take on communication patterns around sexual and reproductive health. When their kids go to high school, parents find it easier to talk to them about these things, but kids react differently when they talk about these things than when they were in middle school.
21	Olutayo and Opadere (2023) Nigeria	Exploring cultural determinants that influence the use of parent-child communication as an instrument to protect children from sexual acts and abuse in 6 residential areas.	In-depth interviews with 6 parents from each village using the simple random sampling method. So the total from all 6 villages is 36 participants.	Qualitative, Content Analysis	Parents' economic activities, religious beliefs, fear of stigmatisation or ridicule, the idea that sex education should only be provided in formal education, and the presumption that sex education should only be provided in formal education are some of the cultural factors that impact parent-child communication regarding reproductive and sexual health. Finally, parents overestimate the state of affairs in their surroundings.
22	Agyei et al. (2023) Ghana	Exploring parents' skill needs in communicating about SRH based on personal and social motivations in the context of Ghanaian society	semi-structured interviews with 10 parents using the purposive sampling method	Qualitative, Thematic analysis	Four themes in SRH communication skills: SRH information, parent and adolescent factors (education, attitudes, presence of threats, education), contextual factors and communication skills needs. Parents and teenagers rarely communicate about SRH because parents do not have the skills to communicate SRH to their teenagers. Communication topics include puberty, menstruation, teenage pregnancy, STIs, sex, and personal hygiene
23	Gibson et al. (2019) USA	Looking at the role of communication between mother-daughter and various races in influencing the decision of girls at the college level to receive sexual health examination services.	An online survey of 301 college students who primarily identified as white and Asian American.	Quantitative, Online Surveys	Maternal communication predicts daughters' behavior in carrying out screening. Female students of Asian descent are less likely to communicate SRH issues with their parents compared to female students of white descent. Apart from that, it was also reported that female students of Asian descent had higher levels of anxiety regarding the results of their reproductive health screening.
24	Ndugga et al. (2023) Uganda	Exploration of factors that influence and inhibit parent-child communication about SRH	8 FGDs consisting of parents and adolescents (10-17 years), and interviews with 25 informants	Qualitative study	Parents play an important role in communicating about SRH, but only a few parents do it. Factors that influence parent-adolescent communication are: a good parent-child relationship, a closer bond between mother and child, and having highly educated parents. However, SRH communication is limited by cultural norms that consider it taboo, parents' lack of knowledge, and parents' busy schedules

Num	Authors, Year, Country	Focus	Participant/ Sample Characteristics	Study Design	Result
25	Grossman and Richer (2022) USA	Knowing how communication patterns between parents and adolescents change during the adolescent transition period.	Longitudinal qualitative study with interviews of 15 adolescent participants at three time points: early adolescence (ages 13–14), mid-adolescence (ages 15–16 years), and early adulthood (20–21).	Qualitative, Longitudinal Study Thematic Analysis	As teenagers become older, family communication around sex and reproductive health continues to evolve. But there have also been changes in content, which mirror the circumstances of late adolescence. Nonetheless, it has been observed that youngsters find it more difficult to have calm conversations on this topic as they approach early adulthood.

Source: Researcher's Collection, 2024.

RESULTS

This paper reviewed 25 selected international journals which were published between 2008 and 2024. The analyzed articles in this study used quantitative methods (14 articles), qualitative methods (8 articles), and mixed-method (3 articles) with research backgrounds in both developed countries (USA, UK, Australia) and developing countries (Bangladesh, India, Ethiopia, Sri Lanka, Nepal, Iran, Ghana, Lao PDR, Oman, Malaysia, Jordan, Uganda, Kenya and Nigeria). There were 3 domains that emerged from communication patterns between parents and adolescents about reproductive and sexual health, namely sociodemographic, subjects of communication, and topics of communication.

1. Sociodemographic

Communication between parents and adolescents regarding reproductive and sexual health was greatly influenced by social and demographic factors (sociodemographics), including education level, culture and religion, and type of residential area.

Education Level

Ten articles showed that parent-adolescent communication about reproductive and sexual health was related to parental education level and knowledge (Adzovie RH & Adzovie DE., 2020; Agyei et al., 2023; Al Zaabi et al., 2021; Grossman et al., 2018; Grossman & Richer, 2022; Ismail K & Hamid SR, 2016; Ndugga et al., 2023; Vongsavanh et al., 2020; Wondimhunegn et al., 2021; Zakariya et al., 2019). The higher the education level of parents, the more often they communicate with their teenage children. Mothers with a high school education or above were known to be 2 times more likely to communicate with their children about reproductive health than mothers who could not read and write (Mihretie et al. 2021). The reason was that parents with higher education had the possibility of exposure to reproductive health information so that they had good knowledge and awareness of the importance of communication about reproductive and sexual health.

In addition, parents who had higher education also tended to have better communication skills. Zakariya et al. (2019) found that the level of parental knowledge was related to the ability of parents to communicate about reproductive and sexual health. The more reproductive and sexual health issues parents knew, the more often parents communicated and discussed with their teenagers (Achen et al., 2022; Agyei et al., 2023; Mihretie et al., 2021; Ndugga et al., 2023; Zakariya et al., 2019). Respondents who had good knowledge about reproductive and sexual health were 3.8 times more likely to communicate with their adolescents about these issues (Wondimhunegn et al., 2021). Parents with higher education also had positive attitudes towards reproductive and sexual health issues and were 2.2 times more likely to communicate with their children about reproductive health (Wondimhunegn et al., 2021).

Culture and Religion

In the reviewed articles, culture and religion were often found as factors determining parents and adolescents' reluctance to communicate about reproductive and sexual health issues. Reproductive and sexual health issues were considered taboo to discuss since these issues were sensitive issues (Achen et al., 2022; Al Zaabi et al., 2021; Asampong et al., 2013; Ismail K & Hamid SR., 2016; Kisaakye et al., 2022; Ndugga et al., 2023; Othman et al., 2020). Wondimhunegn et al., (2021) found that in Ethiopian culture, discussions and communications related to reproductive and sexual health were prohibited and rejected at the community level, especially when it was carried out by parents to their children because they were considered to teach children to engage in sexual habits.

Religious factors were also mentioned as factors that prevented parents from talking about reproductive and sexual health to their children, especially Muslims. Hindu adolescents were 1.76 times more likely to communicate about reproductive health and had better reproductive health knowledge compared to Muslim adolescents (Zakariya et al., 2019). Likewise, Catholic adolescents communicated more about reproductive and sexual health with their parents than Muslim adolescents (Achen, et al., 2022; Kisaakye et al., 2022; Olutayo & Opadere, 2023).

Economic Level

Respondents with high incomes were 2.4 times more likely to have discussions with their teenage children (Kisaakye et al., 2022; Mataraarachchi et al., 2023; Olutayo & Opadere, 2023). Parents who had gadgets (Kisaakye et al., 2022) and had access to newspapers and TV communicated more frequently than those who did not have access (Zakariya et al., 2019). With frequent exposure to media and information, parents had good knowledge about reproductive health which caused them to teach their children. However, this was contrary to the articles of Al Zaabi et al., (2021) and Ndugga et al., (2023) which found that parents with high economic status tended to be busy and did not have enough time to communicate with their teenagers.

Area of Residence

The reviewed articles found that the respondents' area of residence and school influenced parent-child communication regarding reproductive and sexual health. Parents living in urban areas were 2.1 times more likely to discuss reproductive and sexual health issues with adolescents than those living in rural areas (Kisaakye et al., 2022; Wondimhunegn et al., 2021). In addition, Vongsavanh et al. (2020) found that adolescents attending schools in urban areas communicated more frequently with their parents about reproductive and sexual health. Respondents living in urban areas had access to media and information.

2. Subject of Communication

In the subject of Communication, the reviewed articles concluded that parent-adolescent communication patterns about reproductive and sexual health formed their own patterns. Adolescent girls communicated more often with their parents about reproductive health compared to adolescent boys. In addition, adolescent girls discussed reproductive health more often with their mothers than with their fathers although mothers were less knowledgeable about the topic (Adzovie RH & Adzovie DE., 2020; Al Zaabi et al., 2021; Maina et al., 2020; Mihretie et al., 2021; Ndugga et al., 2023; Ogle et al., 2008; Othman, et al., 2020).

62% - 78.2% of adolescent girls obtained reproductive and sexual health information from their mothers, making mothers were used as sources of information (Mataraarachchi et al., 2023). More than 75% of adolescent boys considered their mothers as the first people they discussed about reproductive and sexual health with, followed by older sisters (12%), friends (8%), and others (2%) (Zakariya et al., 2019). Adolescent communication with mothers made them comfortable to discuss reproductive and sexual health (Mataraarachchi et al., 2023; Zakariya et

al., 2019). This was contrary to the research of Wondimhunegn et al. (2021) and Connor et al. (2023) which stated that fathers communicated 2.4 times more often with adolescents than mothers. Study by Vongsavanh et al. (2020) and Kisaakye et al. (2022) stated that adolescent boys communicated more often about reproductive and sexual health than adolescent girls. The majority of fathers considered the importance of their role in communicating reproductive health to their sons. Although fathers agreed that mothers played an important role in their sons' health, fathers believed that when fathers were involved in their children's lives it would have a positive effect in the future (Randolph et al., 2017).

Meanwhile, respondents who lived in extended families obtained information or communicated about reproductive and sexual health with older siblings/uncles/aunts because they were considered less judgmental and more open than their parents (Grossman et al., 2019). Families with more than 4 children rarely communicated with their mothers so they got information about reproductive health from friends and media (Zakariya et al., 2019). Families with many children caused a wide age-difference so that parents and children tended to be reluctant to communicate about reproductive and sexual health (Othman et al., 2020).

In addition, the most important thing in establishing parent-adolescent communication regarding reproductive and sexual health was the establishment of a good relationship and comfort in communicating between parents and their adolescent children, especially when the topic was considered sensitive (Adzovie RH & Adzovie DE., 2020; Connor et al., 2023; Ndugga et al., 2023; Randolph et al., 2017; Vongsavanh et al., 2020; Zakariya et al., 2019). Respondents who lived with their parents and had a good relationship with their parents communicated 1.5 times more often with their parents (Mihretie et al., 2021).

3. Topics of Communication

Content

The topics of communication used by respondents in communicating about reproductive and sexual health tended to only discuss less sensitive topics. More than 80% of respondents talked about menstruation issues and changes during puberty (Ogle et al., 2008; Zakariya et al., 2019). As many as 88% talked about menstruation and 94% about taking care of themselves (Gautam et al., 2023; Mataraarachchi et al., 2023; Wondimhunegn et al., 2021; Othman et al., 2020; Kisaakye et al., 2022). Moreover, Mihretie et al., (2021) stated that 79.9% of adolescent girls discussed child marriage with their mothers (Mihretie et al., 2021). Adolescent girls hoped that when parents communicated with them about reproductive health, the result of communication would act as a shield against bad sexual habits (Mataraarachchi et al., 2023).

Frequency

The reviewed articles showed that reproductive and sexual health was important to be discussed in family communication. Both parents and adolescents had positive attitudes and similar views on the importance of communicating about reproductive health. However, only a few adolescent parents implemented it in family communication (Aggrey et al., 2023; Al Zaabi et al., 2021; Asampong et al., 2013; Mataraarachchi et al., 2023; Mihretie et al., 2021; Ogle et al., 2008; Vongsavanh et al., 2020; Wondimhunegn et al., 2021; Zakariya et al., 2019). This showed that both parents and teenagers were concerned about reproductive health and wanted to discuss it with their parents. However, in practice, the frequency of parent-child communication about the issue was very rare.

The reason why reproductive health topics were rarely raised in family communication was because parents felt confused about starting a conversation about this sensitive issue (Randolph et al., 2017). On the other hand, 27% of adolescents also doubted about whether their parents could answer and explained it (Mataraarachchi et al., 2023). In communication, the communicant

must not only have knowledge about what is being communicated, but must also be able to convey it. Many parents could not inform their children about reproductive and sexual health (Adzovie RH & Adzovie DE., 2020). The frequency of communication about reproductive health between daughters and mothers was more frequent than with fathers (Zakariya et al., 2019).

DISCUSSION

This systematic review aims to explore communication patterns between parents and adolescents about reproductive and sexual health, as well as factors that hinder such communication. Parents are role models in children's lives who can transmit values, traditions, habits, and lifestyles both directly and indirectly to their children. Culture and religion are important factors in parent-adolescent communication about reproductive and sexual health. Culture and religion significantly shape a person's attitudes, beliefs, and behaviors including parent-child relationships. Research by Zakariya et al. (2019), Kisaakye et al. (2022), Achen et al. (2022), and Olutayo and Opadere (2023) found that religion is a factor inhibiting parent-adolescent communication. Their religious beliefs prevent open communication about reproductive and sexual health issues which can hinder them from discussing them within the family. However, Islam does not prohibit communication regarding reproductive and sexual health. Islam actually emphasizes the importance of sexual education for children. Islam encourages parents to educate their children including regarding reproductive health (Al Zaabi et al., 2021).

In addition, traditional and conservative culture prevents parents and adolescents from communicating about reproductive health (Ismail K & Hamid SR., 2016). In Ethiopian culture, discussion and communication about reproductive and sexual health are prohibited and rejected at the societal level. When adolescents are seen with the opposite sex before marriage, they will be punished by their families and will receive negative stigma from the community. Parents who communicate with their children about reproductive health are considered to be violating local norms and culture (Wondimhunegn et al., 2021). Therefore, interventions based on local religion and culture are needed, both in the form of providing information, mobilizing religious and community leaders, and internalizing reproductive health material for adolescents into religious and cultural agendas.

Ten reviewed articles showed that education and knowledge are important aspects in communication (Adzovie RH & Adzovie DE., 2020; Agyei et al., 2023; Al Zaabi et al., 2021; Grossman et al., 2018; Grossman & Richer, 2022; Ismail K & Hamid SR., 2016; Ndugga, et al., 2023, Vongsavanh et al., 2020; Wondimhunegn et al., 2021; Zakariya et al., 2019). Communication between parents and adolescents about reproductive and sexual health is related to the level of parental education and parental knowledge regarding the topic. The higher the level of parental education, the more often they communicate with their adolescent children. A person with a higher education tends to be more exposed to media and reproductive health information, so they have good reproductive health knowledge and a positive attitude about the importance of reproductive and sexual health knowledge for adolescents. Parents who have good knowledge can also understand the importance of communication regarding reproductive and sexual health and form a good attitude towards this issue without being reluctant to convey it to their children.

In addition, good knowledge about reproductive and sexual health forms parents' confidence in conveying what they know correctly. The analyzed articles in this review state that children's perceptions of their knowledge about reproductive health are closely related to the quality of good communication with their parents about this issue. This is because adolescents who already have information or knowledge of reproductive health will be stimulated to start discussions to get more information. This is also in line with other studies conducted by Yohannes and Tsegaye (2015) also Jaleta and Amentie (2017). In addition, parents who are educated and have good knowledge have the habit of discussing and communicating with their children regularly so that

when communicating about reproductive health it does not cause awkwardness (Wondimhunegn et al., 2021). Besides, being important for parents to continue to increase their knowledge about reproductive health so that they can convey it to their teenagers, parents must also get used to communicating with their teenagers every day. Communication habits and good parent-child relationships in the family create comfort in communicating even issues that are considered sensitive and taboo.

Parent-child communication also forms a pattern of communication subjects, namely gender match. Adolescent girls communicate more often about reproductive health with their parents than adolescent boys. Adolescent girls discuss more with their mothers than their fathers, while adolescent boys communicate more often with their fathers (Adzovie RH & Adzovie DE., 2020; Al Zaabi, et al., 2021; Mihretie et al., 2021; Ogle et al., 2008; Ndugga et al., 2023; Othman et al., 2020). Traditionally, girls have a trusting relationship with their mothers due to gender homogeneity. They spend more time at home with their mothers than with their fathers, especially when there is a patriarchal culture that limits women's mobility, such as in Bangladesh. In addition, women tend to have limited access to information on reproductive and sexual health issues other than from their mothers. They are not allowed to leave the house without parental permission. This is in line with other studies conducted in developing countries that the main source of information on reproductive health is the mother (68%) and 78% of adolescents reported that the mother was the first person they communicated with when they got their first menstruation (Dilorio et al., 1999; Fanta et al., 2016; Feldman & Rosenthal, 2014; Shiferaw et al., 2014). This is because mothers have experienced the same changes during puberty. Importantly, among mothers who initiated communication with their daughters, only 42% of them took the initiative to talk about this issue before their first menstruation (Al Zaabi et al., 2021). In other words, most mothers do not initiate puberty discussions before their children enter puberty. This is due to perceived taboos, conservative attitudes and traditional beliefs that when teenagers are informed about reproductive and sexual health issues, it will encourage them to try them.

Wondimhunegn et al. (2021) found that one possible reason for the lack of reproductive health communication between parents and adolescent boys is because parents are not too worried about their adolescent sons because they cannot get pregnant and will not be forced by the opposite sex. In addition, communication between fathers and sons often contains jokes with little health information (Kirkman et al., 2002). This causes mothers to be considered as a source of information in reproductive health communication. It was also found that adolescents with families of more than 4 people made their older sisters, uncles or aunts the objects of communication. This is in line with another study which stated that older sisters were the first people to communicate about reproductive health for adolescents who live in extended-families (Grossman, et al., 2019). This is due to the possibility of a closer age difference compared to their mothers, which can lead to similar ways of thinking and reduce feelings of shame and suspicion from parents. Therefore, interventions to provide reproductive and sexual health information need to involve not only parents, but also people who care for the adolescent (caregivers).

The topic of parent-adolescent communication is also explored in this study which indicates that the discussion topics in communication are very limited and tend to only discuss less sensitive issues such as menstruation and puberty. The difference in the range of discussion topics about menstruation and puberty is due to cultural inconsistencies and attitudes towards reproductive health issues. In Bangladesh, mothers usually limit their discussions to "safe topics" and avoid talking about reproductive and sexual health even in emergencies (Zakariya, et al., 2019). In addition, parents also think that knowledge about reproductive health can cause adolescents to become sexually active. This is in line with studies conducted in developing countries which found that the topics of communication were menstruation, self-protection, and puberty. This is different from studies conducted in developed countries (Connor et al., 2023; Morawska et al., 2015). Therefore, it is necessary to provide accurate and easily accessible information comprehensively so that it can be a reference for parents in communicating with adolescents.

Moreover, eight articles showed that basically parents and adolescents have positive attitudes and expectations of communication about reproductive and sexual health. However, only a few parents-adolescents do so with a fairly low frequency of communication. This is due to several factors including parents not knowing how to start a discussion of sensitive issues (Randolph et al., 2017), not knowing the correct reproductive and sexual health information, not having skill in conveying and explaining information (Adzovie RH & Adzovie DE., 2020), being embarrassed and worried that their children will try sexual activity, and considering their children too young (Pariera, 2016). Meanwhile, from the perspective of adolescents, the factors that hinder them from communicating with their parents are fear of parents' reactions, suspicion from parents, shame, doubts about whether their questions can be answered by their parents (Al Zaabi et al., 2021; Asampong et al, Agyei, et al., 2023; Mihretie et al., 2021, Mataraarachchi et al., 2023; Wondimhunegn et al., 2021; Ogle et al., 2008; Vongsavanh et al., 2020; Zakariya et al., 2019).

CONCLUSION

Communication patterns affect the occurrence of parent-adolescent communication about reproductive and sexual health, including sociodemographics, communication subjects, and communication topics. Creating good family communication patterns is a shared responsibility of parents, adolescents, and other family members. Providing accurate information sources that are easily accessible, involving not only parents but also caregivers, and community-based programs, religion, and local culture are effective interventions to encourage reproductive health communication in the family. In terms of policy impact, this study can provide valuable insights to support the development of policies. First, the internalisation of reproductive and sexual health issues into religious, local cultural and community-based agendas, so that it can eliminate taboo perceptions in society. Second, the integration of reproductive health education, BKKBN needs to work together with the Ministry of Education and the Ministry of Religion, to facilitate teenagers who live in Islamic boarding schools, school dormitories or places other than their homes. Last, effective communication training related to reproductive health, namely holding workshops and regular training for parents, caregivers, and teachers on how to communicate effectively. This can encourage the implementation of good family communication from an early age creating close relationships.

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