



Adolescents and the Prostitution Industry: Changing Patterns of Prostitution, Motivations, Assessments, and Risks Faced

Efa Nugroho^{1✉}, Alfiana Ainun Nisa¹, Bertakalswa Hermawati¹, Bambang Budi Raharjo¹, Erry H. Kamka², Erina Slamet Saputri², Dwi Yunanto Hermawan², Heny Widyaningrum²

¹Faculty of Medicine, Universitas Negeri Semarang, Indonesia

²Indonesian Planned Parenthood Association, Indonesia

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Abstract

The phenomenon of adolescents involved in the prostitution industry was widespread globally, including in Indonesia. This study focused on the changing patterns of prostitution, motivations, perceptions, and risks faced by adolescent sex workers. The research used a mixed-method approach, employing both quantitative and qualitative designs. Data were collected through surveys involving adolescent sex workers and general adolescents, as well as in-depth interviews with adolescent sex workers. The quantitative study included 360 respondents, comprising 180 general adolescents and 180 adolescent sex workers, while the qualitative study involved 30 adolescent sex workers as informants. The research was conducted in Bali, South Kalimantan, West Java, North Sulawesi, North Sumatra, and Central Java provinces. The findings revealed a shift in prostitution patterns among adolescents from conventional (street-based) prostitution to online prostitution via digital platforms. Adolescents had higher opportunities to become online sex workers due to the diversity of social media platforms and service types available. Economic factors accounted for 81.7% of adolescents' reasons for becoming sex workers. There was a disparity in perceptions between general adolescents and the actual challenges faced by adolescent sex workers. Among adolescent sex workers, 80% had low reproductive health knowledge, 23% had experienced sexually transmitted infections (STIs), 16% had faced unwanted pregnancies, and 7% had undergone abortions. It was concluded that there were significant changes in the patterns, motivations, perceptions, and risks associated with adolescent sex work.

Introduction

The phenomenon of adolescent sex workers is a complex issue with significant health, psychological, and social implications. Adolescents involved in sex work face a high risk of sexually transmitted infections (STIs), including HIV, as seen in Cameroon, where adolescents who began sex work before the age of 18 reported higher cases of STIs (Ashley *et al.*, 2023), and in South Africa, where the HIV prevalence among young female sex workers reaches 40.4% (Minja *et al.*, 2022). Additionally, in India, high-risk behaviors such as inconsistent condom use increase the HIV prevalence to 1.2% among adolescent sex

workers (Sanjay *et al.*, 2023). Psychologically, depression rates are higher among those who started sex work during adolescence, as evidenced in Eswatini, where 55.5% experience depression (Ashley *et al.*, 2023). Trauma from sexual exploitation also results in long-term psychological effects (Anne-Lise & Evelyne, 2022). Socioeconomically, financial hardships are a major driver, as seen in South Africa (Minja *et al.*, 2022), while physical and sexual violence exacerbates vulnerability, as reported in India and Cameroon (Sanjay *et al.*, 2023; Ashley *et al.*, 2023). Therefore, a comprehensive approach through public health interventions and socioeconomic support is essential to

✉ Correspondence Address:
Universitas Negeri Semarang, Indonesia
Email: efa.nugroho@mail.unnes.ac.id

mitigate risks and improve the well-being of these adolescents (Alifah RN et al, 2024).

The advancement of technology has contributed to the increasing number of adolescent sex workers (Fatanti MN, 2021). Technology has become an integral part of human life, indirectly driving changes in communication patterns (Handayani, 2019; 2021). It has been easier for individuals to form networks and interact with others without the limitations of distance and time (Thérèse, 2022; Nugroho E et al, 2025). Technological advancements also influenced the ease of prostitution practices, commonly referred to as online prostitution. They no longer needed to solicit on the streets, in hotels, or other prostitution venues, as they could do so through instant communication applications like WhatsApp, WeChat, Line, and others (Sylvia, 2022). Online prostitution provides more private and discreet services, attracting many adolescents to become online sex workers (Rosemary *et al.*, 2019; Hamilton, 2022). Moreover, adolescents working as online sex workers were in higher demand because most of them were young and attractive (Rimawati E, 2010; Rosey, 2021).

Environmental factors influenced sex workers, such as increasing adolescent needs, peer environment, specific lifestyles, and living far from their parents, which prompted adolescents to find ways to earn extra pocket money (Irawan F *et al*, 2019; Susan, 2021). However, the phenomenon of adolescent sex workers was often taboo in society. It not only made it difficult for adolescents involved in the sex industry to talk about their fears and other feelings but also meant that they might face severe stigmatization and prejudice (Alak, 2020; Madeline & Trish, 2022). Compared to sex workers in general, adolescent sex workers remained under-researched in Indonesia. Studying this issue was essential to understand how teenage sex workers could be accepted by their peers and how adolescent attitudes affected how sex workers perceived themselves regarding self-stigmatization and related challenges and demands.

The most common motivation expressed by adolescents for entering the sex industry was to finance a lifestyle (63.5%) (Ernst F,

2021). Flexible working hours were also an important factor, along with the enjoyment they felt while being involved. The primary fear among adolescents regarding their profession as sex workers was stigmatization, which led to their greatest concern—keeping their occupation a secret. Preliminary research on the phenomenon of student sex workers, commonly referred to as “*ayam kampus*,” in Semarang City revealed several factors behind their involvement, including economic reasons (47%), a luxurious lifestyle (22.6%), social environment (21.8%), personal satisfaction (6%), and prestige (2.6%) (Rimawati E, 2010). Most of them were exposed to sex at an early age, leading them to offer sexual services during their university years.

This data highlights that a significant portion of this population is at risk of contracting sexually transmitted infections (STIs) through prostitution. According to 2004 WHO data, approximately 250 million new STI cases—including gonorrhea, syphilis, and genital herpes—were reported annually worldwide. STIs are a gateway for HIV transmission (Pradnyawati, 2019; Widjaja, 2023). Individuals with STIs are 2–9 times more likely to contract HIV compared to those without STIs. In Central Java Province, the number of new STI cases increased over the years: 8,723 cases in 2009, 9,572 in 2010, and 10,752 in 2011. These figures are likely an underrepresentation, as many cases in the population remain undetected (Sari DA, 2018). This research focuses on the changing patterns of prostitution, motivations, perceptions, and risks faced by adolescent sex workers in Bali, South Kalimantan, West Java, North Sulawesi, North Sumatra, and Central Java provinces. The study examines adolescents working in the sex industry and includes direct experiences from individuals involved in prostitution. First, it concentrates on the characteristics, motivations, feelings, and risks faced by adolescents working in the sex industry, particularly in rural and urban areas of Indonesia. Second, it explores adolescents’ knowledge and attitudes toward their peers working as sex workers, focusing on the emotions evoked in adolescents not involved in the sex trade.



Figure 1. Place of Research Implementation

METHODS

The study was conducted in Bali, South Kalimantan, West Java, North Sulawesi, North Sumatra, and Central Java. The research design employed a mixed-methods approach, combining quantitative and qualitative, with the aim of obtaining a deeper understanding of the research topic. The study population consisted of adolescent sex workers and non-sex worker adolescents in these six provinces.

The sample for the quantitative study was calculated using Lemeshow's formula for an unknown population size. With a case-control design ratio of 1:1, the minimum sample size required was 97 adolescent sex workers and 97 non-sex worker adolescents. Considering the margin of error and minimum sample size, the total sample was determined to be 180 non-sex worker adolescents and 180 adolescent sex workers. The sample was distributed across six provinces: Bali, South Kalimantan, West Java, North Sulawesi, North Sumatra, and Central Java. For the qualitative study, in-depth interviews were conducted with adolescents working as sex workers. Triangulation respondents included NGO outreach volunteers for sex workers, representatives from the Social and Child Protection Department, and experts. Participation was voluntary, and no compensation. All participants spoke regional languages or Indonesian, as interviews were in Javanese or Indonesian. A minimum of one informant was recruited from each province, totaling six informants initially.

However, during data collection, the number of informants increased to 30 adolescent sex workers.

The questionnaire for adolescent sex workers was structured to include components such as characteristics, knowledge, access to reproductive health information, access to healthcare services, types of services provided, challenges faced, and levels of happiness. For non-sex worker adolescents, the questionnaire included components such as characteristics, knowledge, access to reproductive health information, access to reproductive health services, access to healthcare services, having friends who are sex workers, perceptions related to sex workers, challenges faced by sex workers, and levels of happiness. The interview guide was structured as follows: 1) Included items on sociodemographic data, and 2) Applied to both adolescent sex workers and non-sex worker adolescents. This study defined sex work in a broader sense. Adolescents offering any form of sex work, such as prostitution in the narrow sense, escort services with or without sexual contact, stripping, webcam services, or phone sex, were included. Participants were also allowed to specify additional types of sex work they engaged in.

RESULTS AND DISCUSSION

Sex work is one of the oldest professions and involves the exchange of sexual services for money or goods. It encompasses a range of activities, from direct sexual intercourse to

Table 1. Services offered by Adolescents Sex Workers

Services Offered	Frequency			Total
	Never	Sometimes	Often	
Sex	1%	40%	59%	100%
Creating Sexy Photo Content	2%	18%	80%	100%
Selling Sexy Photo Content	1%	93%	6%	100%
Creating Sex Video Content	1%	4%	95%	100%
Selling Sex Video Content	1%	2%	97%	100%
Chat Sex	13%	44%	43%	100%
Phone Sex	6%	37%	57%	100%
Video Chat Sex	3%	27%	70%	100%

Source: Primary Data

indirect acts like lap dancing. Different types of sex work, such as “indoor” versus “street” prostitution or “voluntary” versus “forced,” are identified in the literature. Societal views on sex work are influenced by biological, cultural, political, and psychological factors, with stigma and criminalization often attached, especially in patriarchal societies that regulate female sexuality. Historically, sex work has been linked to drug addiction, STDs, and perceived moral failings (Prakash P, 2022). Studies, including those in Indonesia and the Philippines, identify supply (poverty, illiteracy) and demand (men’s ability to pay) as key factors in the proliferation of sex work. The rise of internet technology has introduced a new form of online prostitution, making transactions more private and safer for both workers and clients. It has expanded the sex trade to virtual spaces, allowing for more discretion and the involvement of adolescents, who may engage more in producing and selling pornography than direct sexual acts (Irawan F *et al*, 2019). In conclusion, the complex factors influencing sex work, along with the impact of modern technology, highlight both the persistence and transformation of this phenomenon in society.

Looking at the advantages of online prostitution, which is now very private, it provides more privacy for the perpetrators. Adolescents feel safer regarding the identity of their profession. Various driving factors such as lifestyle, economic factors, and increasing financial needs push adolescents to engage in commercial sex work. From the search results on online prostitution using social media, the author found that most of the call girls were

between 16 and 27 years old. It is the age of schooling, and college, and still considered a very productive age. However, the reality is that the consumerist lifestyle of students in big cities has led some of them to become prostitutes to fulfill their hedonistic needs. The use of social media has become a loophole and a tool for building prostitution networks, both collectively and individually. In line with research by Koops *et al.* (2018), the development of media and webcams has opened up new channels for commercial sex workers on the Internet, which requires further attention. Specifically, the expanding market for child sex trafficking and problematic adults is a target for important interventions. Further use of webcams increases the risk of sexual boundary violations against children and adolescents, ranging from unwanted exposure, and sexual harassment, to commercial sexual exploitation (Fanny, 2020).

The researcher attempts to describe the general perception of issues faced by adolescent sex workers. The perception questions consisted of 14 questions with 3 answer scales: often, sometimes, and never. Based on the research findings, 23% of adolescent sex workers have experienced STIs, 16% have experienced unwanted pregnancies, and 7% have had abortions. In addition, adolescent sex workers often report experiencing stigma (76%), family problems (71%), stress or depression (68%), discrimination (68%), educational issues (66%), verbal abuse (60%), relationship problems with partners or boyfriends (58%), problems with friends (57%), frequent STIs (56%), physical abuse (56%), non-payment by clients (52%),

difficulties in building relationships with others (49%), issues with fellow sex workers (45%), and legal problems (43%). The perceptions of adolescents regarding the issues faced by adolescent sex workers may vary depending on culture, context, and personal experiences. However, some studies suggest that adolescents have different perceptions of the issues faced by their peers involved in sex work. The analysis of findings continues with searching for correlations between research variables and adolescent status. The variables tested for correlation include: a) Knowledge, b) Access to Information, c) Health Services, d) Happiness Perception, e) Trust Perception, and f) Comfort Perception. The distribution of frequencies and correlation test results between variables can be seen in Table 2 below:

The study examines the knowledge of reproductive health among general adolescents and adolescent sex workers, with a focus on

areas such as reproductive health, sexual growth, reproductive organs, pregnancy, sexually transmitted infections (STIs), HIV/AIDS, and unwanted pregnancy. Knowledge was assessed with two response options: correct or incorrect. The results show that 22.5% of general adolescents have low knowledge, and 27.5% have high knowledge. In contrast, 40% of adolescent sex workers have low knowledge, indicating a higher proportion of low knowledge in this group. A chi-square test found a significant correlation ($p\text{-value} = 0.001$) between knowledge and adolescent status, suggesting that adolescent sex workers have significantly lower knowledge than their general peers.

Interviews with adolescent sex workers revealed that most were unaware of basic reproductive health concepts but were familiar with practical aspects such as health services and STI tests. This shift in

Table 2. Crosstab Frequency Distribution of Variables: Knowledge, Access to Information, Health Services, Happiness Perception, Trust Perception, and Comfort Perception, with Adolescent's Status.

Variables Non Sex Worker		Adolescent's Status		<i>p-value</i>
		Sex Worker	Total	
Knowledge	Low	81	144	0.001
	High	99	36	
Total		180	180	360
Access to Information	Not Good	63	119	0.001
	Good	117	61	
Total		180	180	360
Health Services	Not Good	114	82	0.001
	Good	66	98	
Total		180	180	360
Perception of Happiness	Less Happy	87	106	0.045
	Heppy	103	74	
Total		180	180	360
Perception of Trust	Lack of Trust	72	118	0.001
	Trust	108	62	
Total		180	180	360
Perception of Comfort	Lack of Comfort	75	113	0.001
	Comfort	105	67	
Total		180	180	360

Source: Primary Data

focus from theoretical to practical knowledge is linked to their independent work, often without a mentor or pimp, limiting access to comprehensive information. Previous research by Lim (2015) supports these findings, showing that sex workers generally have low theoretical knowledge about reproductive health, STIs, and contraception, which contributes to ineffective preventive practices like poor partner selection and incorrect use of prophylactic antibiotics.

The questions related to information access aimed to obtain an overview of how easily the respondents could access information regarding reproductive health, sexually transmitted infections, reproductive health services, and other related topics. The detailed points of the questions are as follows: Access to reproductive health information through print media, electronic media, social media, parents, schools, and teachers, the frequency of information access, and the completeness and usefulness of the information available. The questions were answered using a 5-point Likert scale: strongly agree, agree, neutral, disagree, and strongly disagree. The frequency distribution of information access for general adolescents and adolescent sex workers is as follows: Among general adolescents, 17.5% have poor access to reproductive health information, and 32.5% have good access to health information. Among adolescent sex workers, 33% have low access to health information, and 16.9% have high access. It can be concluded that adolescent sex workers with low information access are more prevalent compared to other groups.

The chi-square test between information access and adolescent status resulted in a p-value of 0.001. Therefore, it can be concluded that there is a correlation between information access and adolescent status. The next chi-square test was conducted to examine the correlation

between information access and knowledge, which resulted in a p-value of 0.001. Thus, the conclusion is that there is a correlation between information access and knowledge. The results of the test can be seen in Table 3.

Based on in-depth interviews with informants who are adolescent sex workers, the majority of informants lacked basic knowledge regarding reproductive health. Most informants stated they often obtain information through the internet and social media. However, they do not understand the information presented and find it difficult to ask or confirm the information they receive. The informants also mentioned accessing information through health service providers such as public health centers (puskesmas) and the Indonesian Planned Parenthood Association (PKBI), but they often forget the information given. Other informants stated that they do not know how to access information related to reproductive health. According to a study by Barnier (2021), many sex workers are unable to optimally utilize technology and information. There is a need for collaboration between the sex worker community and external parties to develop health and workplace safety strategies communicated through information and communication technology (Hermawan DY, 2023).

The study also explored the access to and use of health services among general adolescents and adolescent sex workers, focusing on aspects such as timing, types of services accessed, ease of access, and perceptions of service quality. Respondents answered using a 5-point Likert scale ranging from “strongly agree” to “strongly disagree”. The results revealed that 31.6% of general adolescents reported poor access to health services, while only 18.3% reported good access. Among adolescent sex workers, 22.7%

Table 3. Crosstab Frequency Distribution of Information Access and Knowledge Variables

Variables		Knowledge		p-value
		High	Total	
Access to Information	Not Good	131	51	0.001
	Good	94	84	
Total		180	180	360

Source: Primary Data

reported poor access, and 27.2% reported good access. It indicates that general adolescents face higher challenges in accessing health services compared to adolescent sex workers, who, despite facing some barriers, have a higher percentage reporting good access to services.

A chi-square test showed a significant correlation (p -value = 0.001) between health service access and adolescent status, suggesting that adolescent sex workers have different access patterns compared to general adolescents. Interviews with adolescent sex workers indicated that while they often use reproductive health check-up services, they rarely seek other health services like reproductive health counseling or psychological support. Supporting previous research, Makhakhe (2019) identified challenges sex workers face in accessing reproductive health care, especially in public health facilities, where stigma often prevents them from seeking services. However, non-governmental organizations (NGOs) have been instrumental in providing specialized reproductive health services through mobile clinics and peer-based approaches, which help build trust with healthcare providers and normalize HIV testing. This approach has improved the health-seeking behavior of sex workers by offering specialized services, preventive materials, and essential health information (Bernier, 2021).

Perception or level of happiness was measured using the SOEP (Socioeconomic Panel) instrument. Respondents were asked to indicate how often or rarely they experienced certain feelings over the past four weeks. The feelings requested for completion were anger, worry, happiness, and sadness. Happiness perception was measured using a 5-point scale: very often, often, sometimes, rarely, and very rarely. The frequency distribution of happiness levels for general adolescents and adolescent sex workers is as follows: 24% of general adolescents reported feeling unhappy, and 28.6% reported feeling happy. Among adolescent sex workers, 29.4% reported feeling unhappy, and 20.5% reported feeling happy. It can be concluded that a higher proportion of adolescent sex workers felt unhappy compared to other groups. The chi-square test between happiness and adolescent status resulted a

p -value of 0.045. Therefore, we concluded that there is a correlation between happiness and adolescent sex worker status.

Perception or trust was measured using several questions related to the respondents' trust in others, using a 5-point Likert scale: strongly agree, agree, neutral, disagree, and strongly disagree. The frequency distribution of trust perception for general adolescents and adolescent sex workers is as follows: 20% of general adolescents reported feeling distrustful of others, and 30% reported feeling trusting. Among adolescent sex workers, 32.7% reported feeling distrustful of others, and 17.2% reported feeling trusting. We concluded that a higher proportion of adolescent sex workers felt distrustful of others compared to other groups. The chi-square test between trust perception and adolescent status yielded a p -value of 0.001. Therefore, we concluded that there is a correlation between trust perception and adolescent sex worker status.

The study assessed the comfort perception of general adolescents and adolescent sex workers by examining how comfortable they felt in various aspects of their lives, including health, work, income, living conditions, leisure time, family life, and personal life. Comfort was measured on a scale from 1 to 10. The findings showed that 41% of general adolescents reported feeling uncomfortable with their conditions, while a higher proportion, 63%, of adolescent sex workers felt uncomfortable with their status. This discomfort was felt across various life aspects, including work, health, income, housing, leisure, family, and personal life.

The chi-square test revealed a significant correlation (p -value = 0.001) between comfort perception and adolescent status, indicating that adolescent sex workers experience more discomfort compared to their general peers. The discomfort among adolescent sex workers was most pronounced in their work and family life. Economic factors were cited as the primary reason for choosing sex work, with many adolescent sex workers stating that they would stop once their financial situation improved. It highlights the profound impact of economic challenges on their well-being and decisions regarding work and life choices.

Sex workers face numerous challenges in their profession, including violence, legal issues, relationship difficulties, and health problems. Analysis of in-depth interviews with informants revealed that sex workers experience relatively high levels of mental health issues. However, despite these challenges, most have never sought psychological counseling. Some informants reported not considering it necessary, while others cited the high cost of counseling services as a barrier. In addition to mental health struggles, several informants shared experiences of unplanned pregnancies. To prevent such pregnancies, they reported using various contraceptive methods, including emergency contraceptive pills, birth control pills, condoms, and other forms of contraception. This highlights both the physical and emotional burdens that sex workers face, as well as the limited access to affordable psychological and health services.

Regarding healthcare needs, informants stated that they required services, such as general health check-ups, STI tests, VCT (Voluntary Counseling and Testing), Pap

smears, and pregnancy tests. They expressed that these services are essential for sex workers. Although informants highlighted various healthcare needs, they also acknowledged their lack of motivation to access these services, whether general healthcare, reproductive health services, psychological counseling, or others. Concerning the ideal support model for adolescent sex workers, informants recommended the following key points: 1) Organizing educational and gender-based online violence (GBOV) mitigation activities for adolescent sex workers, 2) Developing digital services to enhance access to reproductive health information and services, 3) Implementing reproductive health Information, Education, and Communication (IEC) activities involving Peer Educators, integrated with both static and mobile healthcare services, 4) Ensuring that every healthcare facility can provide youth-friendly services, particularly in offering reproductive health services without stigma or discrimination., 5) Engaging sex workers as agents of change for preventing STI transmission, especially HIV/AIDS.

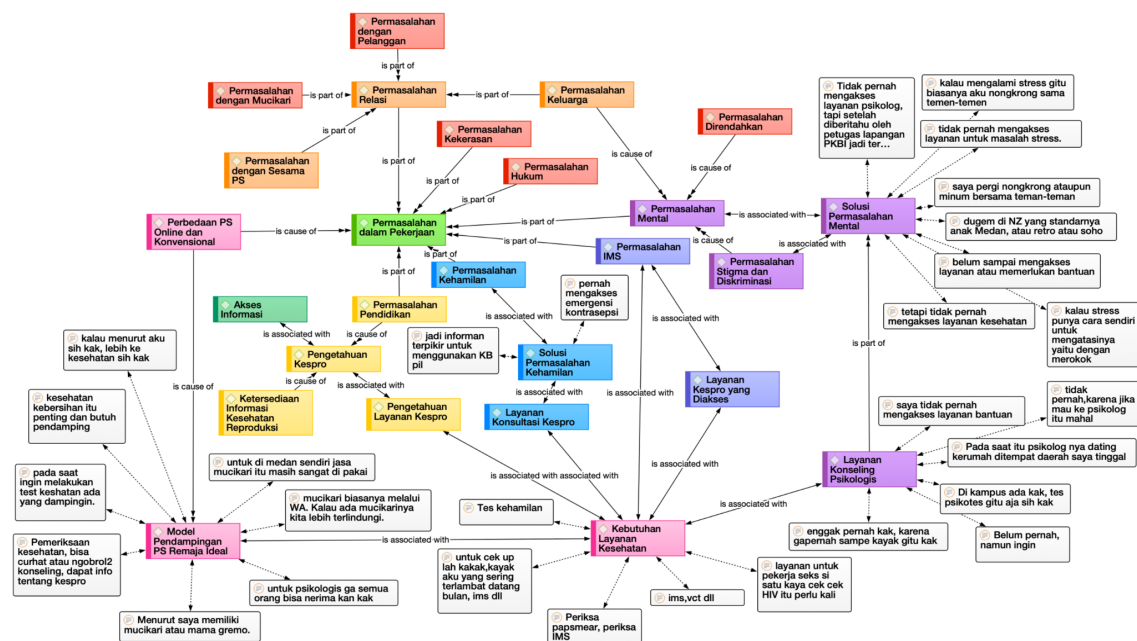


Figure 2. Problems and the Ideal Model of Mentoring Adolescents Sex Workers (qualitative analysis in Bahasa).

CONCLUSION

There has been a shift in prostitution patterns among adolescents, moving from conventional prostitution (street-based) to online prostitution through digital platforms. The opportunities for adolescents to become online sex workers are higher due to the variety of platforms and services offered through social media. Economic factors drive 81.7% of adolescents to become sex workers. There are differences in perceptions between general adolescents about the problems faced by adolescent sex workers and the actual issues experienced by them. Findings include 80% of adolescent sex workers have low reproductive health knowledge, 23% have experienced STIs, 16% have faced unintended pregnancies, 7% have undergone abortions.

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