

CHAPTER III

**RESEARCH DATA ON THE CORRELATION BETWEEN KNOWLEDGE
OF SEXUAL REPRODUCTION, OPENNESS IN DISCUSSING SEXUAL
TOPICS, AND AWARENESS OF THE HUMAN PAPILLOMAVIRUS
INFECTION TOWARDS WILLINGNESS FOR HUMAN PAPILLOMAVIRUS
INFECTION VACCINATION**

This study addresses the correlation between knowledge of sexual reproduction, openness in discussing sexual topics and awareness of the HPV infection towards willingness for HPV infection vaccination. The test was conducted on 300 female respondents, aged 17 to 24 years and have not received the HPV vaccination. This chapter will present the data results from the questionnaires that have been distributed to the respondents.

3.1 Validity Test

A validity test is a method used to demonstrate the degree to which the instrument being tested precisely measures its intended area of measurement. The questionnaire item is regarded as valid if the calculated r-count value is greater than the r-table value. As can be observed, the study used 300 respondents (N) with a two-tailed table value of 0.113. If the r count obtained is greater than 0.113, the item is considered valid, whereas if the r count is smaller than 0.113, the item is considered invalid. The validity test results from this study are presented in the table below:

3.1.1 Validity Test of Knowledge of Sexual Reproduction (X₁)

The validity test is conducted on each variable by testing each question item. The following are the results of the validity test performed on the knowledge of sexual reproduction variables.

Table 3.1 Results of Variable Validity Test (X₁)

Statement Item Codes	r count	r table	Description
X1.1	0.130	0.113	Valid
X1.2	0.574	0.113	Valid
X1.3	0.133	0.113	Valid
X1.4	0.215	0.113	Valid
X1.5	0.543	0.113	Valid
X1.6	0.315	0.113	Valid
X1.7	0.668	0.113	Valid
X1.8	0.614	0.113	Valid
X1.9	0.381	0.113	Valid
X1.10	0.360	0.113	Valid
X1.11	0.650	0.113	Valid
X1.12	0.552	0.113	Valid
X1.13	0.630	0.113	Valid
X1.14	0.574	0.113	Valid
X1.15	0.495	0.113	Valid
X1.16	0.411	0.113	Valid
X1.17	0.118	0.113	Valid
X1.18	0.133	0.113	Valid
X1.19	0.565	0.113	Valid
X1.20	0.595	0.113	Valid
X1.21	0.624	0.113	Valid
X1.22	0.673	0.113	Valid
X1.23	0.438	0.113	Valid

The validity test results for variable X₁, namely knowledge of sexual reproduction, are presented in Table 3.1. It was discovered that all research instruments in variable X₁ had a r-count value greater than the r-table (0.113), indicating that all

instruments in the knowledge of sexual reproduction (X_1) variable were determined to be **valid**.

3.1.2 Validity Test of Openness in Discussing Sexual Topics (X_2)

The validity test is conducted on each variable by testing each question item. The following are the results of the validity test performed on the openness in discussing sexual topics variable.

Table 3.2 Results of Variable Validity Test (X_2)

Questions Item Codes	r count	r table	Description
X2.1	0.700	0.113	Valid
X2.2	0.628	0.113	Valid
X2.3	0.525	0.113	Valid
X2.4	0.629	0.113	Valid
X2.5	0.638	0.113	Valid
X2.6	0.629	0.113	Valid
X2.7	0.722	0.113	Valid
X2.8	0.720	0.113	Valid
X2.9	0.746	0.113	Valid
X2.10	0.712	0.113	Valid
X2.11	0.579	0.113	Valid
X2.12	0.609	0.113	Valid
X2.13	0.497	0.113	Valid
X2.14	0.544	0.113	Valid
X2.15	0.581	0.113	Valid
X2.16	0.723	0.113	Valid
X2.17	0.688	0.113	Valid
X2.18	0.652	0.113	Valid
X2.19	0.636	0.113	Valid
X2.20	0.702	0.113	Valid

The validity test results shown in table 3.2, show that all research instruments in variable X_2 , namely openness in discussing sexual topics, have a r-count value

greater than the r-table (0.113). All instruments on the variable of openness in discussing sexual topics (X₂) were determined to be **valid**.

3.1.3 Validity Test for Awareness of the HPV Infection (X₃)

The validity test is conducted on each variable by testing each question item. The following are the results of the validity test performed on the awareness of the HPV infection variable.

Table 3.3 Results of Variable Validity Test (X₃)

Questions Item Codes	r count	r table	Description
X3.1	0.758	0.113	Valid
X3.2	0.823	0.113	Valid
X3.3	0.775	0.113	Valid
X3.4	0.774	0.113	Valid
X3.5	0.741	0.113	Valid
X3.6	0.729	0.113	Valid
X3.7	0.217	0.113	Valid
X3.8	0.541	0.113	Valid

The validity test conducted on variable X₃, which measures awareness of the HPV infection as shown in table 3.3, indicates that all research instruments have a r-count value higher than the r-table value (0.113). Therefore, all instruments assessing awareness of HPV infection (X₃) are deemed **valid**.

3.2 Reliability Test

The reliability test is a test of whether the measurement process conducted can be considered reliable or consistent. Measurement of the reliability value can be done

by examining the Cronbach's Alpha value on each research variable. An instrument is considered reliable if the Cronbach's Alpha value is > 0.6 .

Table 3.4 Reliability Test Results on Overall Research Variables

Variable	<i>Cronbach's Alpha</i>	Criteria	Descriptive
Knowledge of Sexual Reproduction	0,848	0,6	Reliabel
Openness in Discussing Sexual Topics	0,924	0,6	Reliabel
Awareness of Human Papillomavirus Infection	0,834	0,6	Reliabel

Based on the results of the reliability test in table 3.4, it can be seen that all research variables, namely Knowledge of Sexual Reproduction, Openness in Discussing Sexual Topics, Awareness of the HPV Infection fulfill the reliability test standard, which has a Cronbach's Alpha value more than 0.6, means that all research instrument questions on each variable are **reliable**.

3.3 Respondent Identity

Demographic data is used to determine an overview of information about the respondent. Demographic data in this study includes age and domicile. Age is included in the respondent's identity which serves as a research demographic to provide key information about the respondent that may affect the results and interpretation of the study. Analysis of the findings can be seen in the table below:

Table 3.5 Respondent's Age

Age	Total	Percentage
17 Years Old	17	5.7%
18 Years Old	26	8.7%
19 Years Old	31	10.3%
20 Years Old	22	7.3%
21 Years Old	43	14.3%
22 Years Old	76	25.3%
23 Years Old	52	17.3%
24 Years Old	33	11.0%
Total	300	100%

The table 3.5 shows a variety of respondents in different ages, results showed that the majority of respondents were 22 years old with a percentage of 25.3%. The high majority of respondents is explained by the demographic characteristics of the population, such as students in their final years at university as the distribution of questionnaires through the student community group. The second highest number of respondents is 23 years old with a percentage of 17.3%. Whereas, the lowest number of respondents at the age of 17 years old with a percentage of 5.7%.

This study provided the respondents' domicile in the questionnaire for data collection. The domicile information helped to identify geographical variations and regional differences in behavior and experiences, thus providing useful context for the research findings. In addition, understanding the domicile of respondents helps to ensure that the sample is representative of different regions, thereby increasing the level of generalizability of the research results. Analysis of the findings can be seen in the table below:

Table 3.6 Respondent Domicile

Domicile (Province)	Total	Percentage
Aceh	1	0.3%
Bali	7	2.3%
Banten	51	17.0%
Bengkulu	1	0.3%
Daerah Istimewa Yogyakarta	14	4.7%
DKI Jakarta	54	18.0%
Jambi	1	0.3%
Jawa Barat	74	24.7%
Jawa Tengah	58	19.3%
Jawa Timur	19	6.3%
Kalimantan Selatan	1	0.3%
Kalimantan Timur	2	0.7%
Lampung	1	0.3%
Sulawesi Selatan	5	1.7%
Sulawesi Tenggara	1	0.3%
Sumatera Barat	2	0.7%
Sumatera Selatan	8	2.7%
Total	300	100%

Based on the results of distributing questionnaires to 300 respondents, this study found that the majority were from West Java province with 74 respondents, representing 24.7% of the total respondents. The high number of respondents from West Java province could be due to several factors, including its large population and the possibility of greater interest in the topic of the questionnaire. In addition, the presence of a university that facilitated the distribution of questionnaires may also have contributed to the high response rate from this province. Central Java had 58 respondents, accounting for 19.3% of the total. On the other hand, some respondents also came from other provinces as researchers also utilized social media to distribute the questionnaires. Therefore, a wide distribution was obtained, such as Aceh,

Bengkulu, Jambi, East Kalimantan, Lampung, and Southeast Sulawesi had the fewest respondents, with one respondent for each, representing for a mere 0.3% of the total respondents.

3.4 Knowledge of Sexual Reproduction (X₁)

The knowledge of sexual reproduction (X₁) variable is the possession of information individuals have on understanding to the sexual reproduction. Knowledge of sexual reproduction was measured using three indicators, namely, 1) knowledge about female and male reproductive system, 2) knowledge regarding sexually transmitted diseases, contraception, masturbation, and sexual intercourse 3) involvement in sexual activities (Deshmukh & Chaniana, 2020). The three indicators were further developed into 23 statement items in total. The items are given to measure the respondent's knowledge and afterwards the total number of respondents will be categorized into low, medium and high.

Knowledge of the female and male reproductive system is the first indicator that evaluates the variable knowledge of sexual reproduction. This statement set covers various aspects of the male and female reproductive system, from the structure to the function of the reproductive system organs. Four statements cover the internal organs of the female reproductive system and four statements focus on the male reproductive system. These statements are given to view a comprehensive knowledge of the human reproductive system. This indicator is then further elaborated into 8 statement items, resulting in the following table:

Table 3.7 Frequency of Knowledge of Sexual Reproduction

Statements	Response Options		Total
	True	False	
1. Organ internal pada sistem reproduksi wanita meliputi vagina, rahim, saluran tuba dan ovarium.	295 (98,3%)	5 (1,7%)	300 (100%)
2. Saluran tuba bertanggung jawab untuk memproduksi sel telur dalam sistem reproduksi wanita.	102 (34,0%)	198 (66,0%)	300 (100%)
3. Rahim adalah organ di mana bayi berkembang sebelum lahir.	290 (96,7%)	10 (3,3%)	300 (100%)
4. Ovarium adalah organ reproduksi primer pada wanita.	289 (96,3%)	11 (3,7%)	300 (100%)
5. Kelenjar prostat membantu testis memproduksi cairan yang mengandung sel sperma untuk membentuk air mani.	225 (75,0%)	75 (25,0%)	300 (100%)
6. Testis adalah organ reproduksi primer pria.	273 (91,0%)	27 (9,0%)	300 (100%)
7. Uretra adalah saluran gabungan antara vesikula seminalis (kelenjar mani) dan vas deferens (saluran sperma) pada laki-laki.	131 (43,7%)	169 (56,3%)	300 (100%)
8. Skrotum membantu mengatur suhu testis untuk produksi sperma yang optimal.	218 (72,7%)	82 (27,3%)	300 (100%)

According to table 3.7, the respondents have answered 8 statement items from the first indicator of sexual reproductive knowledge, namely knowledge of the female and male sexual reproductive systems. The statement items in the questionnaire were created with the option of “true” or “false” with the aim of measuring the knowledge and understanding of respondents in the statement items given. However, this study only uses 2 option meanings, which are true and false, as don't know also has the same meaning as not knowing. Therefore, the answer of don't know was transferred to the wrong answer.

The results showed that the respondents tended to have a high level of knowledge as indicated by the correct answers chosen for each item. Based on the table

above, respondents answered correctly regarding female sexual reproduction, in item number 1 with the statement of internal organs in the female reproductive system including the vagina, uterus, fallopian tubes and ovaries. The following results demonstrate a proficient knowledge of the main organs of the female reproductive system. For knowledge on male sexual reproduction, the most correct answers were on item number 6, with the statement testes are the primary reproductive organs of the male. To show a downward trend, it can be seen in item number 2 as many as 66.0% who answered correctly, with the statement of the function of the fallopian tubes and a drop to item number 7 about understanding the urethra with the least correct answers with 56.3%.

Knowledge of sexually transmitted diseases, contraception, masturbation, and sexual intercourse is the second indicator that evaluates the variable on knowledge of sexual reproduction. The set of statement items covers various aspects related to sexual and reproductive health, as well as sexually transmitted diseases (STDs). Some statements highlighted the risk of sexual transmission. Then, there are statement items that emphasize the importance of condom use by women in sexual activities, hormone function and statements about masturbation. From this indicator, it was transformed into 8 items of statements, resulting in the following table:

Table 3.8 Frequency of Knowledge of Sexual Reproduction

Statements	Response Options		Total
	True	False	
1. Seseorang yang melakukan hubungan seksual dengan penderita gonore berisiko tinggi untuk tertular infeksi.	277 (92,3%)	23 (7,7%)	300 (100%)
2. Salah satu penularan HIV yang paling sering terjadi adalah melalui hubungan seksual, baik secara vaginal maupun anal tanpa menggunakan pengaman, seperti kondom.	288 (96,0%)	12 (4,0%)	300 (100%)
3. Herpes kelamin disebabkan oleh virus yang sama dengan HIV.	103 (34,3%)	197 (65,7%)	300 (100%)
4. Pil Kb dapat mencegah penularan infeksi dari hubungan seksual, termasuk HIV/AIDS.	66 (22,0%)	234 (78,0%)	300 (100%)
5. Kondom wanita atau dental dam dapat digunakan sebagai pelindung saat melakukan seks oral.	201 (67,0%)	99 (33,0%)	300 (100%)
6. Ketika masturbasi, tubuh seseorang akan mengeluarkan hormon kortisol atau hormon stress dalam jumlah kecil yang membantu menjaga sistem kekebalan tubuh.	202 (67,3%)	98 (32,7%)	300 (100%)
7. Pada wanita, masturbasi yang terlalu sering akan mengakibatkan kerusakan pada selaput darah, iritasi pada vagina dan meningkatkan risiko infeksi vagina.	243 (81,0%)	57 (19,0%)	300 (100%)
8. Pelumas dapat digunakan untuk mengurangi rasa tidak nyaman atau nyeri saat berhubungan seksual.	260 (86,7%)	40 (13,3%)	300 (100%)

Through table 3.8 the respondents have answered 8 statement items from the second indicator of sexual reproductive knowledge, namely knowledge of sexually transmitted diseases, contraception, masturbation, and sexual intercourse. The statement items in the questionnaire were made with the choice of “true” or “false” with the aim of measuring respondents' understanding. However, this study only uses 2 option meanings, namely true and false, as don't know also has the same meaning as not knowing. Therefore, the answer of don't know was moved to the wrong answer.

The results indicated that the respondents tended to have an adequate knowledge as shown by the correct answers chosen for each statement item. Based on the most correct answer is item number 2 as much as 98.0% regarding sexually transmitted diseases, with the statement that one of the most common HIV transmissions is through sexual intercourse, both vaginally and anally without using safety, such as condoms. While, item 7 and 8 have percentages of correct answers that are not quite so far apart where both discuss masturbation and sexual intercourse statements. A declining percent, however, is seen in item number 3, which has the lowest true answer value, with the item statement that genital herpes is caused by the same virus as HIV.

Involvement in sexual activity is the third indicator that evaluates the variable of knowledge of sexual reproduction. This indicator is used to determine respondents' understanding of involvement in sexual activity through their knowledge. Some questions aim to seek knowledge through respondents' sexual involvement, such as the use of contraceptives, attempts to obtain information on sexual safety and prevention of sexually transmitted infections. Then, respondents' understanding of symptom identification of sexually transmitted infections. From this indicator, it is then transformed into 7 question items, resulting in the following table:

Table 3.9 Frequency of Knowledge of Sexual Reproduction

Questions	Response Options		Total
	Yes	No	
1. Apakah Anda pernah melakukan hubungan seksual dengan lawan jenis Anda?	25 (8,3%)	275 (91.6%)	300 (100%)
2. Apakah Anda menggunakan alat kontrasepsi saat berhubungan seksual?	25 (8,3%)	275 (91.6%)	300 (100%)
3. Apakah Anda mencari informasi tentang keamanan seksual dan pencegahan penyakit menular seksual?	258 (86,0%)	42 (14.0%)	300 (100%)
4. Apakah anda tahu tentang mengidentifikasi gejala penyakit menular seksual?	250 (83,3%)	50 (16,6%)	300 (100%)
5. Apakah Anda tahu di mana mencari bantuan jika Anda atau seseorang yang Anda kenal mengalami masalah kesehatan seksual?	203 (67,7%)	97 (32,3%)	300 (100%)
6. Apakah Anda memiliki pemahaman yang memadai tentang risiko kesehatan yang terkait dengan aktivitas seksual?	223 (74,3%)	77 (25,6%)	300 (100%)
7. Apakah Anda mencari informasi tentang pentingnya mendapatkan tes dan pemeriksaan kesehatan seksual secara berkala?	189 (63,0%)	111 (37.0%)	300 (100%)

According to table 3.9, all respondents have answered 7 question items from the third indicator. The table presents the knowledge about involvement in sexual activity known by the respondents. The statement items in the questionnaire were constructed with an option of “yes” or “no” with only two answer options, making the assessment more objective and reducing the possibility of different interpretations.

The results of this study show that respondents tend to have an adequate understanding, which is shown by the agreement of the answers chosen for each item. The most selected answers were items number 1 and 2 as much as 91.6%. It can be seen that respondents have consistency in answering that they have never had sexual intercourse. For those who have done, they have the knowledge to use contraceptives

to avoid unpleasant issues. To remain stable, percentages are seen in items 3 and 4, which stated that they know sexual safety information and identify the symptoms of sexually transmitted infections. The lowest yes answer, shown on item number 7 as much as 63% where they have an understanding of getting regular sexual health tests and examinations.

Based on the results of the data obtained through three indicators of the variable knowledge of sexual reproduction (X_1), the overall data is then categorized into three level results, namely low, medium and high. This categorization includes:

1. Score 0 - 7 are classified as low knowledge category.
2. Score 8 - 15 are classified as medium knowledge category
3. Score 16 - 23 are classified as high knowledge category

Table 3.10 Categorization of Knowledge of Sexual Reproduction Variable

Score	Category	F	Percentage
0 – 7	Low	4	1.3%
8 – 15	Medium	102	34.0%
16 – 23	High	194	64.7%
Total		300	100%

In the knowledge of sexual reproduction variable, it can be determined that the majority of respondents have adequate knowledge. Therefore, after the data is processed and categorized as a whole, it can be concluded that the knowledge of sexual reproduction possessed by respondents is included in the high knowledge category and results in a percentage value of **64.7%**.

3.5 Openness in Discussing Sexual Topics (X₂)

Openness in discussing sexual topics (X₂) is the attitude of individuals who are willing to engage in conversations about various aspects of sexuality without hesitation or judgment to contribute to better communication within the sphere of sexuality. Openness in discussing sexual topics was measured using one indicator, namely communication about sexuality (Somers & Canivez, 2003). The indicators were further developed into 20 question items. The items were given to determine the respondent's openness to discussing sexual topics and afterwards the respondent's total number will be categorized into less open, fairly open and open.

Communication about sexuality is an indicator that examines the variable of openness in discussing sexual topics. The set of questions explores the extent to which individuals engage in discussions regarding various aspects of sexuality. These questions cover topics ranging from the sexual reproductive system, pregnancy, menstruation and masturbation, to general sexual health. It also includes discussions on non-penetrative sexual activity, sexual intercourse, and the use and impact of contraceptives. Furthermore, these questions assess individuals' engagement in discussions about sensitive issues such as teenage pregnancy, sexual dysfunction and sexual orientation. In summary, these questions are designed to measure individuals' level of openness in discussing various topics of sexuality. From this indicator, it is then transformed into 20 question items, resulting in the following table:

Table 3.11 Frequency of Openness in Discussing Sexual Topics

Questions	Response Options		Total
	Yes	No	
1. Apakah Anda pernah terlibat dalam diskusi mengenai dengan sistem reproduksi seksual?	247 (82,3%)	53 (17,7%)	300 (100%)
2. Apakah Anda pernah terlibat dalam diskusi mengenai dengan kehamilan?	238 (79,3%)	62 (20,7%)	300 (100%)
3. Apakah Anda pernah terlibat dalam diskusi mengenai dengan menstruasi?	281 (93,7%)	19 (6,3%)	300 (100%)
4. Apakah Anda pernah terlibat dalam diskusi mengenai dengan ejakulasi saat tidur pada pria tanpa adanya rangsangan seksual (mimpi basah)?	181 (60,3%)	119 (39,7%)	300 (100%)
5. Apakah Anda pernah terlibat dalam diskusi mengenai dengan masturbasi?	194 (64,7%)	106 (35,3%)	300 (100%)
6. Apakah Anda pernah terlibat dalam diskusi mengenai dengan kesehatan seksual?	250 (83,3%)	50 (16,7%)	300 (100%)
7. Apakah Anda pernah terlibat dalam diskusi mengenai dengan aktivitas seksual tanpa melakukan penetrasi (petting)?	179 (59,7%)	121 (40,3%)	300 (100%)
8. Apakah Anda pernah terlibat dalam diskusi mengenai dengan hubungan seksual?	236 (78,7%)	64 (21,3%)	300 (100%)
9. Apakah Anda pernah terlibat dalam diskusi secara umum mengenai dengan alat kontrasepsi, seperti: kondom, intra uterine device (IUD) dan suntik KB?	210 (70,0%)	90 (30,0%)	300 (100%)
10. Apakah Anda pernah terlibat dalam diskusi mengenai dengan penggunaan alat kontrasepsi?	182 (60,7%)	118 (39,3%)	300 (100%)
11. Apakah Anda pernah terlibat dalam diskusi mengenai dengan dampak dari kehamilan remaja?	254 (84,7%)	46 (15,3%)	300 (100%)
12. Apakah Anda pernah terlibat dalam diskusi mengenai dengan infeksi menular seksual?	246 (82,0%)	54 (18,0%)	300 (100%)
13. Apakah Anda pernah terlibat diskusi mengenai dengan gangguan penurunan dalam menikmati aktivitas seksual (disfungsi seksual)?	134 (44,7%)	166 (55,3%)	300 (100%)
14. Apakah Anda pernah terlibat dalam diskusi mengenai dengan perilaku seksual remaja tanpa ikatan pernikahan (seks pranikah)?	233 (77,7%)	67 (22,3%)	300 (100%)
15. Apakah Anda pernah terlibat dalam diskusi mengenai dengan aborsi dan masalah hukum yang terkait?	184 (61,3%)	116 (38,7%)	300 (100%)
16. Apakah Anda pernah terlibat dalam diskusi mengenai dengan prostitusi?	189 (63,0%)	111 (37,0%)	300 (100%)
17. Apakah Anda pernah terlibat dalam diskusi mengenai dengan orientasi seksual, seperti:	223 (74,3%)	77 (25,7%)	300 (100%)

Questions	Response Options		Total
	Yes	No	
heteroseksual, biseksual, homoseksual dan aseksual?			
18. Apakah Anda pernah terlibat dalam diskusi mengenai dengan pornografi?	215 (71,7%)	85 (28,3%)	300 (100%)
19. Apakah Anda pernah terlibat dalam diskusi mengenai dengan pelecehan seksual?	256 (85,3%)	44 (14,7%)	300 (100%)
20. Apakah Anda pernah terlibat dalam diskusi mengenai dengan pemerkosaan?	236 (78,7%)	64 (21,3%)	300 (100%)

As can be seen from the table above, all respondents have answered 20 questions from the communication about sexuality indicator. The question items in the questionnaire were created with “yes” or “no” options with only two answer choices, allowing for a more objective assessment and reducing the possibility of different interpretations. This study shows that respondents tend to have openness in discussing sexual topics, as seen from the “yes” option in engagement on the topic of discussion given by the researcher on each question item.

The table above shows that, a majority of 93.7% of respondents engaged in discussions about menstruation, the second highest percent followed by the topic of sexual harassment. There are some sexual topics that have responses with a stable percentage, such as pregnancy, adolescent sexual health and STIs. However, there were significant variations in openness towards certain sexual topics. Only a few respondents, 44.7%, reported having engaged in discussions about sexual dysfunction. This indicates that there are differences in preference or comfort in discussing certain

topics. This may reflect the subjective interest or relevance of these topics to each individual in their openness.

Based on the results of the data obtained through the variable indicator of openness in discussing sexual topics (X_2), the overall data is then categorized into three level results, namely less open, fairly open and open. This categorization includes:

1. Score of 0 - 6 are classified as less open category
2. Score of 7 – 13 are classified as fairly open category
3. Score of 14 – 20 are classified as open category

Table 3.12 Categorization of Openness in Discussing Sexual Topics Variable

Score	Category	F	Percentage
0 – 6	Less Open	32	10.7%
7 – 13	Fairly Open	71	23.7%
14 – 20	Open	197	65.7%
Total		300	100%

In the variable openness in discussing sexual topics, it can be seen that the majority of respondents have an adequate openness. Therefore, after the data is processed and categorized as a whole, it can be concluded that openness in discussing sexual topics held by respondents is included in the level of open category and results in a percentage value of **65.7%**.

3.6 Awareness of the Human Papillomavirus Infection Variable (X₃)

Awareness of Human Papillomavirus (HPV) infection (X₃) is an individual's aware of the existence of human papillomavirus infection as the sexually transmitted infection. Awareness of the HPV Infection was measured using one indicator, namely HPV awareness, perception and experience (Kasymova et al., 2019). Through this indicator, all item questions were developed to determine how aware or well informed individuals are about HPV, their perceptions of the associated health risks and the preventive measures they are taking or have been advised to do. This indicator is then further elaborated into 8 items of questions, resulting in the following table:

Table 3.13 Frequency of Awareness of the HPV Infection Variable

Questions	Response Options		Total
	Yes	No	
1. Pernahkah Anda mendengar tentang HPV?	261 (87,0%)	39 (13,0%)	300 (100%)
2. Apakah Anda mengetahui bahwa HPV merupakan infeksi menular seksual yang paling umum?	230 (76,7%)	70 (23,3%)	300 (100%)
3. Apakah Anda mengetahui bahwa jenis HPV tertentu dapat meningkatkan risiko kutil kelamin sampai kanker serviks?	202 (67,3%)	98 (32,7%)	300 (100%)
4. Pernahkah Anda mendengar tentang Vaksin HPV?	259 (86,3%)	41 (13,7%)	300 (100%)
5. Apakah Anda menganggap bahwa HPV sebagai masalah kesehatan yang serius?	260 (86,7%)	40 (13,3%)	300 (100%)
6. Apakah Anda menganggap bahwa vaksinasi HPV penting untuk mencegah jenis penyakit tertentu?	271 (90,3%)	29 (9,7%)	300 (100%)
7. Apakah Anda pernah test untuk infeksi HPV?	11 (3,7%)	289 (96,3%)	300 (100%)
8. Apakah seorang profesional medis menyarankan vaksin HPV kepada Anda?	80 (26,7%)	220 (73,3%)	300 (100%)

It can be seen from the table above that all respondents have answered 8 questions from the indicator. The question items in the questionnaire were constructed with “yes” or “no” options with only two answer choices, allowing for a more objective assessment and reducing the possibility of different interpretations. This result shows that respondents tend to have an adequate awareness of the HPV infection, as seen by the large number of “yes” options on each question item.

According to the 4.3 table, it can be viewed that almost all respondents have an adequate awareness of the Human Papillomavirus Infection. The majority of respondents believe that the HPV vaccine is important to prevent certain diseases. Looking at item number 1, where 87% of respondents have heard of HPV, but even though they have heard there are 10.3% of respondents who do not know that HPV is the most common STI. Only a few of respondents were recommended for the HPV vaccine by a medical professional, followed by many respondents who had never been tested for HPV infection. Overall, nearly all respondents knew about HPV as a common STI that can lead to cancer, considered it a serious health problem and considered vaccination as a preventive measure.

Based on the results of the data obtained through the indicators of the awareness of the HPV Infection variable (X_3), the overall data is then categorized into three level results, namely low, medium and high awareness. This categorization includes:

1. Score 0 – 2 are classified as low awareness category
2. Score 3 – 5 are classified as medium awareness category
3. Score 6 – 8 are classified as high awareness category

Table 3.14 Categorization of Awareness of the HPV Infection Variable

Score	Category	F	Percentage
0 – 2	Low	37	1.3%
3 – 5	Medium	72	34.0%
6 – 8	High	191	64.7%
Total		300	100%

In the awareness of the HPV Infection variable, it can be seen that the majority of respondents have an adequate awareness. Therefore, after the data is processed and categorized as a whole, it can be concluded that the awareness possessed by respondents regarding HPV Infection is included in the high awareness and produces a percentage value of **64.7%**.

3.7 Willingness for Human Papillomavirus Infection Vaccination (Y)

Willingness for Human Papillomavirus Infection Vaccination is an individual's tendency to be willing to engage in behaviors related to receiving a HPV vaccination. Willingness for Human Papillomavirus Infection vaccination was measured using one indicator, whether respondents are willing to be vaccinated against HPV (Dai et al., 2022). Item was provided to assess whether or not a respondent was willing for HPV vaccination, resulting in the following table:

Table 3.15 Frequency of Willingness for HPV Infection Vaccination Variable

Question	Response Options		Total
	Yes	No	
1. Apakah anda bersedia untuk di vaksinasi dengan vaksin HPV?	253 (84,3%)	47 (15,7%)	300 (100%)

The table above shows the percentage and frequency of respondents who are willing to be vaccinated against HPV. Questions in the questionnaire were constructed with only two options of “yes” or “no” with the aim of providing two main relevant choices. This question represents the respondent's decision between the two options of receiving or refusing the vaccination. The result shows that as many as 253 respondents expressed willingness for HPV infection vaccination, while the rest of respondents stated that they were not willing. Therefore, the level of willingness for HPV vaccination of the respondents studied can be considered significantly high.

3.8 Discussion

In the variable of Knowledge of Sexual Reproduction (X_1) which is measured through three indicators. The findings show that the majority of respondents have an adequate knowledge of the main organs in the female reproductive system and several key aspects related to sexually transmitted diseases and contraceptive use. However, there was either confusion or lack of knowledge on some subjects, such as the structure of the urethra in male and sexually transmitted diseases such as genital herpes and HIV. Involvement in sexual activity also indicates a favorable understanding of sexual

safety. Therefore, after the data is analyzed and categorized, it can be concluded that the respondents' knowledge of sexual reproduction is stated in high knowledge as it results in a percentage value of 65.7% as shown in table 4.0.

The variable Openness in Discussing Sexual Topics (X_2) measured through the indicator communication about sexuality indicates that the majority of respondents have been involved in several sexual topics. However, there is variation in openness to certain topics, with only a few respondents engaging in discussions of other topics, indicating that each topic has its own level of comfort. From the categorization of this variable, openness in discussing sexual topics is included in the open category, with a percentage of 65.7% as shown in table 4.2. This indicates an attitude to discuss sexual topics, although with variation in the level of openness depending on the topic discussed.

The research results regarding the Awareness of the Human Papillomavirus (HPV) Infection (X_3) variable as measured through indicators, namely the awareness, perception, and experience of HPV. It shows that the majority of respondents have heard of HPV and are aware that it is a common sexually transmitted infection. Yet, only a few respondents had ever been tested for HPV infection, with only a minority receiving HPV vaccination advice from a medical professional. The majority of respondents perceived HPV as a major health concern and viewed HPV vaccination as an essential step to prevent the infection. Based on categorization, respondents' awareness of the HPV infection was in the high awareness category, at 64.7% as shown in table 4.4.

The variable of Willingness for HPV Infection Vaccination (Y), which examines the willingness of respondents to vaccinate against HPV infection. Table 4.5 shows that more than 200 respondents are willing to be vaccinated with the HPV vaccine, with a percentage of 84.3%. This result can be considered a positive indication that respondents understand the advantages of vaccination as a prolonged preventive measure to protect themselves from HPV infection.