

KNOWLEDGE ABOUT HUMAN REPRODUCTION AND EXPERIENCE OF PUBERTY

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4.1 KNOWLEDGE AND EXPERIENCE OF PUBERTY

Knowledge of the physiology of human reproduction and the means to protect oneself against sexual or reproductive problems and diseases should be available to adolescents. Better knowledge of these subjects among young adults will lead to correct attitudes and responsible reproductive health behavior.

4.1.1 Knowledge of Physical Changes

In the 2002-2003 Indonesia Young Adult Reproductive Health Survey (IYARHS), respondents were asked several questions to measure their knowledge about human reproduction and the experience of puberty. They were asked to name any physical changes that a boy or a girl goes through during the transition from childhood to adolescence. The responses were spontaneous, without any prompting from the interviewer. The findings are presented in Table 4.1. It is interesting to note that while the respondents may have experienced some of the physical changes listed in the questionnaire, some may not have recognized them as part of the process of growing up into adulthood; others may not report them to the interviewer.

Table 4.1 Knowledge of physical changes at puberty						
Percentage of unmarried women and men age 15-24 who know of specific physical changes in a boy and a girl at puberty, by age, IYARHS 2002-2003						
Indicators of physical changes	Women			Men		
	15-19	20-24	Total	15-19	20-24	Total
In a boy						
Develop muscles	26.3	27.7	26.8	33.1	30.4	32.0
Change in voice	52.2	65.6	56.7	35.5	44.6	39.2
Growth of facial hair, pubic hair, chest, legs and arms	24.8	32.8	27.4	29.3	35.1	31.7
Increase in sexual arousal	6.3	5.9	6.2	9.5	16.6	12.4
Wet dreams	12.4	16.8	13.8	25.5	28.6	26.8
Growth in Adam's apple	20.9	28.3	23.4	10.7	10.4	10.5
Hardening of nipples	0.3	0.6	0.4	0.3	0.6	0.4
Other	13.2	13.4	13.3	16.5	17.0	16.7
Don't know any signs	24.0	14.7	21.0	19.7	13.5	17.1
In a girl						
Growth of pubic hair and underarm hair	17.0	19.9	18.0	11.2	16.9	13.5
Growth in breasts	52.1	58.7	54.3	47.4	51.9	49.3
Growth in hips	18.3	19.1	18.6	13.4	16.3	14.6
Increase in sexual arousal	6.3	9.3	7.3	5.5	10.3	7.5
Menstruation	68.5	72.7	69.9	32.3	42.4	36.5
Other	16.4	14.9	15.9	7.3	7.5	7.4
Don't know any signs	12.0	8.2	10.7	30.6	24.3	28.0
Number	1,214	601	1,815	1,377	964	2,341

For boys, the change most frequently reported by both female and male respondents is the change in the voice (57 percent of women and 39 percent of men), followed by development of muscles and growth of facial hair (for each, 27 percent of women and 32 percent of men).

While some knowledge of physical changes is known to the respondents, few respondents mention increase in sexual arousal as one of the signs of adolescence. Women are less likely than men to mention this indicator as a physical change in a girl as well as in a boy.

Overall, for both women and men, older respondents are more likely than younger respondents to be able to name physical changes that occur at puberty.

A sizable proportion of women (21 percent) and men (28 percent) do not know any of the signs of physical changes of the opposite sex. The lack of knowledge of basic biology among young people is worth noting, because it reflects the lack of knowledge of risks associated with their body and how to avoid them.

4.1.2 Source of Knowledge of Physical Changes

In the survey, respondents were asked about the source of knowledge of physical changes that occur at puberty. Table 4.2 shows that the most often cited source is friends, with 45 percent of women and 57 percent of men reporting this source of information. The pattern is consistent regardless of the respondent's age.

Source of information	Women			Men		
	15-19	20-24	Total	15-19	20-24	Total
Friends	45.4	44.9	45.2	54.6	59.2	56.5
Mother	32.1	27.3	30.5	10.9	10.7	10.8
Father	3.8	2.1	3.3	3.9	3.7	3.8
Siblings	5.1	5.8	5.3	2.5	2.0	2.3
Relatives	2.1	1.9	2.0	2.3	2.2	2.3
Teacher	31.7	27.7	30.4	30.2	25.0	28.0
Health service provider	0.8	2.0	1.2	0.8	0.8	0.8
Religious leader	0.7	1.8	1.0	2.2	3.9	2.9
Television	12.7	20.6	15.4	8.2	14.6	10.9
Radio	3.0	7.8	4.6	2.0	4.6	3.0
Book/magazine/newspaper	18.5	31.8	22.9	12.6	23.7	17.2
Other	0.2	1.0	0.5	0.5	0.6	0.5
No one	15.5	14.4	15.1	22.3	17.0	20.1
Missing	0.3	0.0	0.2	0.8	0.4	0.7
Total	1,214	601	1,815	1,377	964	2,341

Teachers play a key role in imparting knowledge about physical changes during adolescence; 32 percent of women and 30 percent of men said that they heard about the physical changes from their teachers. For both women and men, younger respondents are more likely than their older counterparts to mention teachers as a source of information about physical changes during adolescence. Since the survey does not investigate further details of this information, it is not clear whether the respondents actually discussed the topic with their teachers or received the information as part of class instructions.

Among women, 31 percent mentioned their mothers as the source of information on physical changes. Men are much less likely than women to mention either of their parents as a source of

information on physical changes during adolescence; 11 percent cited their mothers, and only 4 percent cited their fathers.

Other than personal contacts, printed media such as books, magazines, and newspapers are often cited as the source of information about changes that boys and girls undergo during transition from childhood to adulthood (23 percent of women and 17 percent of men). Regardless of gender, older respondents are more likely than younger ones to mention this source of information.

Television is another source of information for physical changes, mentioned by 15 percent of women and 11 percent of men. There are television programs that cover various topics on reproductive health, which sometimes include signs of physical changes. However, these programs are not specifically designed for adolescent viewers. For both women and men, older respondents are more likely than younger ones to mention television as a source of information.

Fifteen percent of women and one in five men did not discuss the physical changes that occur at puberty with anyone. Younger respondents are more likely than older respondents to talk about physical changes with someone.

4.1.3 Menstruation

This section focuses on the experiences of female respondents as they were going through puberty. They were asked about their age at first menstruation and whether they discussed the experience with someone. Table 4.3 shows that very few women (less than 1 percent) have never menstruated. A small proportion of women had their first menstruation before age 12 (4 percent). Twenty percent of women had their first menses at age 12, 29 percent at age 13, and by age 15, practically all women had menstruated. This finding is similar to that of a study conducted by the Demographic Institute showing that 84 percent of women experience menarche (first menses) at age 12-15 (Demographic Institute et al., 2002). Data in the table also show that younger women start to have their period at an earlier age than older women. For example, 88 percent of women age 15 have menstruated by age 14, compared with 75 percent of 24-year-olds.

Current age	Age at first menstruation								Percentage who never menstruated	Total	Number
	<10	11	12	13	14	15	16	17+			
15	1.9	3.4	25.0	25.0	32.3	10.3	na	na	2.0	100.0	280
16	1.4	3.9	18.6	34.0	24.5	15.4	0.6	na	1.6	100.0	254
17	1.5	4.7	20.8	26.7	22.7	18.3	4.4	0.9	0.0	100.0	252
18	0.3	3.2	16.3	23.5	26.8	20.3	5.5	3.9	0.0	100.0	250
19	0.6	1.8	20.5	30.4	22.0	18.9	5.2	0.4	0.2	100.0	177
20	0.7	3.4	18.4	29.6	20.7	13.9	8.0	4.8	0.5	100.0	210
21	0.7	2.7	12.4	39.0	16.8	16.7	6.3	5.4	0.0	100.0	138
22	0.0	1.9	17.4	27.1	20.7	22.2	6.8	3.3	0.5	100.0	111
23	0.0	5.7	20.9	31.0	21.6	11.9	2.5	6.4	0.0	100.0	71
24	0.9	1.7	31.0	30.8	10.1	16.1	6.5	2.9	0.0	100.0	71
Total	1.0	3.4	19.8	29.0	23.6	16.2	4.1	2.2	0.6	100.0	1,815

na = Not applicable

When asked whether they discussed menstruation with anyone prior to having their first menses and whom they discussed it with, most women report that they discussed it with their friends (55 percent) (Table 4.4). Younger women are as likely to talk with their friends about menstruation as older women. Thirty-six percent of women report having discussed the topic of menstruation with their mothers, and 15 percent have discussed it with their siblings. Three in ten women did not discuss menstruation with anyone prior to their first menses.

The limited communication between parents and children about reproduction is also seen in a recent survey of four provinces (Achmad and Westley, 1999), which found that less than 30 percent of young adults spoke with their parents about this topic and that these discussions occurred mostly between mothers and daughters.

Another question asked female respondents whether they talked with anyone about menstruation at the time they had their first period. Table 4.5 presents these findings. Unlike the information presented in Table 4.4, mothers are reported by seven in ten women as the first person with whom they talked with when they had their first period. The next choice is friends (39 percent), followed by siblings (15 percent). One in ten women did not discuss menstruation with anyone when they had their first period.

Table 4.4 Discussion of menstruation before first menses			
Among unmarried women age 15-24 who have begun menstruation, percentage who discussed menstruation with specific persons prior to first menses, by age, IYARHS 2002-2003			
Person with whom menstruation was discussed	Age		Total
	15-19	20-24	
Friends	55.3	53.9	55.0
Mother	35.5	36.4	36.0
Father	1.4	1.4	1.4
Siblings	14.1	15.2	14.5
Relatives	4.1	4.3	4.1
Teacher	7.7	8.2	8.0
Health service provider	0.4	0.6	0.5
Religious leader	1.4	1.7	1.5
Other	0.5	0.2	0.4
No one	28.9	29.4	29.0
Number	1,204	599	1,803

Table 4.5 Discussion of menstruation at time of first menses			
Among unmarried women age 15-24 who have begun menstruation, percentage who discussed menstruation with specific persons at the time of first menses, by age, IYARHS 2002-2003			
Person with whom menstruation was discussed	Age		Total
	15-19	20-24	
Friends	41.4	34.9	39.3
Mother	70.2	76.4	72.3
Father	3.1	2.2	2.8
Siblings	14.6	14.7	14.7
Relatives	4.0	8.0	5.3
Teacher	0.6	1.0	0.7
Health service provider	0.1	0.3	0.2
Religious leader	0.3	0.1	0.2
Other	0.4	0.1	0.3
No one	11.5	9.0	10.7
Number	1,204	599	1,803

The role of mothers in talking about menstruation the first time it occurs is slightly stronger among older women than among younger women. While 76 percent of women age 20-24 talked with their mothers at the first menses, the corresponding proportion for women age 15-19 is 70 percent. On the other hand, younger women are more likely than older women to talk with their friends (41 percent, compared with 35 percent). Other people have a minimal role in discussions at the time of first menstruation.

4.1.4 Wet Dreams

In the 2002-2003 IYARHS, male respondents only were asked about their experiences with wet dreams. These questions include the age when they started having wet dreams and discussions about wet dreams with anyone before their occurrence. Table 4.6 shows that very few men had their first wet dream before age 12 (less than 2 percent). About half of the male respondents said that they had their first wet dream at age 14 or 15, 21 percent of men at age 14 and 28 percent at age 15. By age 16, nine in ten men have had wet dreams.

Data in the table also show that younger men experienced their first wet dream earlier than older men. For example, 59 percent of men age 15 have had a wet dream by age 14, compared with 29 percent of 24-year-olds. Table 4.6 also shows that 7 percent of male respondents have never had a wet dream.

Table 4.6 Age at first wet dream

Percent distribution of unmarried men 15-24 by age at first wet dream, according to current age, IYARHS, 2002-2003

Age	Age at first wet dream									Percentage who never had a wet dream	Total	Number
	<10	11	12	13	14	15	16	17+	Missing			
15	0.6	1.0	9.5	15.9	32.0	15.9	na	na	0.6	24.4	100.0	287
16	1.0	3.2	5.5	10.5	24.0	33.0	4.9	na	1.6	16.3	100.0	269
17	2.1	1.6	5.2	10.7	16.0	36.6	16.5	3.0	0.0	8.3	100.0	278
18	0.1	2.7	9.0	12.0	17.9	29.0	17.4	7.6	0.3	4.0	100.0	330
19	1.5	0.0	2.4	12.0	22.3	28.4	14.8	16.4	1.0	1.3	100.0	213
20	1.3	0.5	5.4	13.2	17.2	32.1	9.4	19.1	0.5	1.1	100.0	251
21	2.0	0.4	1.5	8.3	16.5	32.4	8.2	26.9	1.7	2.2	100.0	199
22	0.4	0.0	3.9	12.4	18.8	23.4	17.4	23.1	0.0	0.6	100.0	209
23	0.0	1.0	5.4	9.5	23.8	18.2	15.9	21.3	0.6	4.3	100.0	164
24	0.0	0.7	2.9	8.8	16.9	20.8	17.4	29.8	0.0	2.7	100.0	140
Total	0.9	1.3	5.5	11.6	20.8	27.6	11.7	12.6	0.6	7.3	100.0	2,341

na = Not applicable

Male respondents were also asked whether they had discussed wet dreams with anyone before they had the first dream. Data in Table 4.7 show that the majority of men talk with their friends (45 percent). There are small differences by age.

Tables 4.4 and 4.7 show that men are less likely than women to discuss physical changes in their body with someone. While 29 percent of women did not talk with anyone about menstruation prior to having their first menses, 48 percent of men did not talk to anyone about wet dreams before having one.

Table 4.7 Discussion of wet dreams before first wet dream

Among unmarried men age 15-24 who had wet dreams, percentage who discussed wet dreams with specific persons prior to first wet dream, by age, IYARHS 2002-2003

Person with whom wet dream was discussed	Age		Total
	15-19	20-24	
Friends	43.5	45.9	44.6
Mother	2.3	2.1	2.2
Father	1.6	2.7	2.1
Siblings	1.1	1.7	1.4
Relatives	1.4	1.8	1.6
Teacher	9.7	8.3	9.1
Health service provider	0.4	0.0	0.2
Religious leader	2.6	2.3	2.5
Other	0.3	0.6	0.4
No one	49.6	45.8	47.9
Missing	0.1	0.0	0.1
Number	1,224	945	2,169

4.2 KNOWLEDGE OF FERTILE PERIOD AND RISK OF PREGNANCY

The success of periodic abstinence as a family planning method depends on women's and men's understanding of the monthly cycle and the days when a woman is most likely to conceive. Therefore, basic knowledge of the mechanisms of reproduction, including the women's monthly fertile cycle, is important. In the 2002-2003 IYARHS, all respondents were asked about their knowledge of a woman's fertile period in the ovulatory cycle. First, they were asked, whether there are certain days from one menstrual period to the next, when a woman is more likely to become pregnant if she has sexual relations. Those who responded positively to this question (53 percent of women and 32 percent of men, data not shown) were further asked when this time is; whether it is just before her period begins, during her period, right after her period has ended, or halfway between two periods. This information is presented in Table 4.8.

Table 4.8 Knowledge of the fertile period

Percent distribution of unmarried women and men age 15-24 who know that there are certain days in a woman's menstrual cycle when she is more likely to become pregnant, by perceived fertile period, according to age, IYARHS 2002-2003

Perceived fertile period	Women			Men		
	15-19	20-24	Total	15-19	20-24	Total
Just before period	13.1	18.6	15.3	10.4	7.3	8.8
During period	2.1	1.3	1.8	0.8	0.7	0.8
Right after period	50.5	43.9	47.9	53.2	48.2	50.6
Halfway between periods	27.9	30.7	29.0	26.4	38.0	32.3
Other	0.1	1.9	0.8	1.1	0.4	0.8
Don't know, missing	6.3	3.6	5.2	8.1	5.5	6.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	583	376	959	363	378	741

Data in the table show that knowledge about the fertile period is deficient among women as well as among men; only 29 percent of women and 32 percent of men gave the correct response that a woman has the greatest chance of becoming pregnant in the middle of her ovulatory cycle. Compounded with the fact that only half of women and one in three men know that there is a period in the menstrual cycle when a woman has an elevated risk of becoming pregnant, there is a need to increase young people's knowledge on risks of pregnancy.

There are slight differences in knowledge of the fertile period between women and men; 71 percent of women and 68 percent of men gave an incorrect response. While there are differences by age, the gap is slightly wider for men than for women. For instance, 26 percent of men age 15-19 have the correct knowledge about the fertile period, compared with 38 percent of men age 20-24; among women, the corresponding percentages are 28 and 31 percent, respectively.

In the 2002-2003 IYARHS, respondents were asked whether a woman risks becoming pregnant after having sexual intercourse only once. In general, women's knowledge of pregnancy risk after one episode of sexual intercourse is slightly higher than men's (50 and 46 percent, respectively) (Table 4.9). This finding is similar to that in a survey of women and men age 15-24 conducted in 1999, where 58 percent of women and 50 percent of men said that a woman can become pregnant after having sexual intercourse only once (Demographic Institute et al., 2002).

As expected, older, urban, and more educated respondents are more knowledgeable about the risk of becoming pregnant after one instance of sexual intercourse.

4.3 HEALTH EXAMINATION BEFORE MARRIAGE

In the 2002-2003 IYARHS, respondents were asked whether couples who are planning to get married need to have a health examination. If so, they were asked what type of test they think is necessary before marriage. The question was unprompted, and the respondents could give more than one response. Most women and men said that a health examination is necessary before marriage. Table 4.10 shows that 83 percent of men and 73 percent of women think that a physical examination before marriage is necessary. In this survey, physical tests include x-rays and tests of the heart, chest, eyes, and ear, nose, and throat.

The necessity of having blood and urine tests is less realized. A much lower proportion of women and men mention blood tests before marriage (18 and 15 percent, respectively). An even lower percentage of respondents report the need to have a urine test before marriage (9 percent each).

Table 4.9 Knowledge of risk of pregnancy		
Percentage of unmarried women and men age 15-24 who think that a woman can become pregnant after one instance of sexual intercourse, by background characteristics, IYARHS 2002-2003		
Background characteristic	Women	Men
Age		
15-19	45.5	41.0
20-24	57.6	51.8
Residence		
Urban	54.4	54.0
Rural	40.4	35.5
Education		
Less than completed primary	35.5	28.9
Completed primary	33.2	30.7
Some secondary	47.9	42.8
Secondary +	61.3	64.1
Total	49.5	45.5
Number	1,815	2,341

Table 4.10 Test before marriage
Percentage of unmarried women and men age 15-24 who said that a medical test before marriage is necessary, by type of test, and age, IYARHS 2002-2003

Type of test	Women			Men		
	15-19	20-24	Total	15-19	20-24	Total
Physical	73.3	72.9	73.2	81.3	84.5	82.7
Blood	15.3	21.7	17.6	12.8	18.6	15.4
Urine	7.5	11.2	8.8	7.7	9.6	8.5
Other	1.7	0.1	1.2	0.4	0.2	0.3
Don't know	0.0	0.0	0.0	0.0	0.2	0.1
Number	1,005	553	1,558	1,073	827	1,901

4.4 KNOWLEDGE ABOUT ANEMIA

One of the targets of the Healthy Indonesia 2010 national program is to reduce anemia prevalence among adolescents to below 20 percent (Ministry of Health, 2001). Iron deficiency is the most common and widespread nutritional disorder in developing countries (World Health Organization et al., 2001). The risk of anemia during adolescence is higher when a woman becomes pregnant. Anemia may also elevate the risk of death among anemic women if excessive bleeding occurs, low birth weight babies, and babies with congenital disorders. The risk of anemia is not only found in women, but also in men.

Iron deficiency, specifically iron deficiency anemia, remains one of the most severe and important nutritional problems in Indonesia. Results of the 2001 Neonatal Household Health Survey show that anemia prevalence is 27 percent among women age 15-19 and 40 percent among pregnant women (Ministry of Health, 2002b).

When asked whether they have ever heard of anemia, 80 percent of women and 60 percent of men gave a positive answer (data not shown). The majority of those who said that they had heard of anemia (81 percent of women and 74 percent of men) said that anemia is a blood deficit (*kurang darah*) (Table 4.11). It should be added here that while the term “blood deficit” is inaccurate, this is the most widely used term to identify anemia in Indonesia. The next most cited responses among young adults are deficit in red blood cells (9 percent of women and 11 percent of men) and iron deficiency (7 percent of women and 5 percent of men). Few respondents give other responses.

Table 4.11 Knowledge of anemia
Among unmarried women and men age 15-24 who have heard of anemia, percentage who have specific perceptions of what anemia is, by age, IYARHS 2002-2003

Perception of anemia	Women			Men		
	15-19	20-24	Total	15-19	20-24	Total
Deficit in red blood cells	7.7	12.6	9.4	11.0	10.7	10.9
Blood deficit	80.5	82.8	81.3	72.7	76.7	74.4
Iron deficiency	5.8	8.8	6.8	5.4	4.8	5.2
Low blood pressure	2.1	2.0	2.1	1.0	2.5	1.7
Vitamin deficiency	2.6	2.3	2.5	2.6	5.0	3.7
Other	4.1	2.3	3.5	4.9	4.3	4.6
Don't know	9.4	5.3	7.9	14.9	12.2	13.7
Missing	0.1	0.0	0.1	0.2	0.0	0.1
Number	960	511	1,470	794	827	1,407

For both women and men, knowledge is slightly higher among older respondents, compared with younger respondents. This finding is similar to that of a study conducted among adolescents age 15-24 in four provinces, which found that 88 percent of women and men said that anemia is a condition of “shortage of blood supply” (*kurang darah*) (Demographic Institute, et al., 2002). The findings showed that knowledge of anemia among respondents is low. Therefore, there is need for information, education, and communication (IEC) for adolescents who do not know about anemia and those who have misconceptions about the problem.

4.4.1 Knowledge of Causes of Anemia

Table 4.12 shows that two areas related to anemia call for attention in this report. The first is the misconceptions about anemia, shown by the large proportions of women and men (45 percent of women and 36 percent of men) whose response to the cause of anemia question is coded “Other.” This means that the response has no relation to any of the precoded categories that encompass the correct answers. The second area of concern refers to the group of respondents who were unable to identify a cause of anemia (21 percent of women and 30 percent of men). These are groups of adolescents who should be targeted for IEC in issues related to anemia.

Cause of anemia	Women			Men		
	15-19	20-24	Total	15-19	20-24	Total
Lack of consumption of meat, fish, and liver	23.1	24.4	23.6	22.7	23.9	23.2
Lack of consumption of vegetables and fruits	28.5	23.5	26.8	19.0	23.7	21.0
Bleeding	2.9	1.9	2.5	1.4	4.0	2.5
Menstruation	1.9	3.5	2.4	0.7	1.7	1.1
Malnutrition	9.9	13.1	11.0	10.9	12.6	11.6
Infectious disease	0.4	0.5	0.5	0.3	0.4	0.4
Other	41.9	49.4	44.5	34.5	37.9	35.9
Don't know	24.7	15.1	21.4	31.6	27.5	29.8
Number	960	511	1,470	794	613	1,407

Among those who gave valid responses, lack of various dietary intakes such as meat, fish, vegetables, and fruits is the most cited reason for being anemic (50 percent of women and 44 percent of men). Variations between women and men are not significant. For example, 27 percent of women and 21 percent of men mention lack of consumption of vegetables and fruits as the cause of anemia (Table 4.12).

4.4.2 Knowledge of Anemia Treatment

Respondents who had heard of anemia were also asked how anemia should be treated. Table 4.13 indicates that the most often cited anemia treatment reported by both women and men (59 percent of women and 54 percent of men) is to take pills to “increase blood” (*pil tambah darah*). Again, this is a misnomer, but a term widely used in Indonesia. A much lower percentage mentioned taking iron tablets as a remedy for anemia (11 percent of women and 14 percent of men).

Table 4.13 Knowledge of anemia treatment

Among unmarried women and men age 15-24 who have heard of anemia, percentage who reported specific treatments for anemia, by age, IYARHS 2002-2003

Treatment for anemia	Women			Men		
	15-19	20-24	Total	15-19	20-24	Total
Take pill to increase blood	54.9	65.8	58.7	48.4	60.5	53.7
Take iron tablet	10.5	12.2	11.1	14.5	12.7	13.7
Increase consumption of meat, fish, and liver	12.6	18.6	14.7	14.5	18.7	16.3
Increase consumption of vegetables rich in iron	20.2	21.4	20.7	14.9	18.3	16.4
Other	18.3	30.9	22.7	16.7	17.2	17.0
Don't know	20.3	12.5	17.6	25.2	18.5	22.3
Number	960	511	1,470	794	613	1,407

The findings showed that knowledge of three aspects of anemia—knowledge of the term, causes of anemia, and how to treat the problem—is low among adolescents. While the percentage of young women and men who have heard of anemia is high, the exact meaning of the problem is lost in the translation into *Bahasa Indonesia*. Knowledge of what causes anemia and how to treat the problem is relatively low. Therefore, there is a need for IEC activities to address all anemia-related issues that should target adolescents. This can be done through formal and informal education, such as community meetings organized by nongovernmental organizations (NGOs) and discussions among peers.

4.5 DISCUSSION ON REPRODUCTIVE HEALTH

One of the objectives of the 2002-2003 IYARHS was to find out the sources from which young adults in Indonesia obtained information on reproductive health. In the survey, respondents were asked whether they have had any discussion with anyone on issues related to human reproduction, including physiology of reproduction, menstruation, wet dreams, fertile period, pregnancy, sexually transmitted infections, and family planning methods. In this survey, the discussions on these topics may be part of a conversation between the respondent and anyone. In certain cultures, sexuality is often considered a taboo subject between adolescents and their parents. A survey conducted in 1998-1999 shows that only 29 percent of young adults spoke to their parents about reproduction before marriage (Achmad and Westley, 1999).

Table 4.14 and Figure 4.1 show that 13 percent of female respondents and 22 percent of male respondents never discussed reproductive health with anyone. The majority of the respondents who discussed reproductive health issues talked with their peers (74 percent of women and 69 percent of men). Women talked with family members about reproductive health more than men; 49 percent of women talked with their parents, and 33 percent talked with their siblings, compared with 13 and 14 percent of men, respectively. Women were also more likely than men to talk with their relatives (27 percent compared with 14 percent).

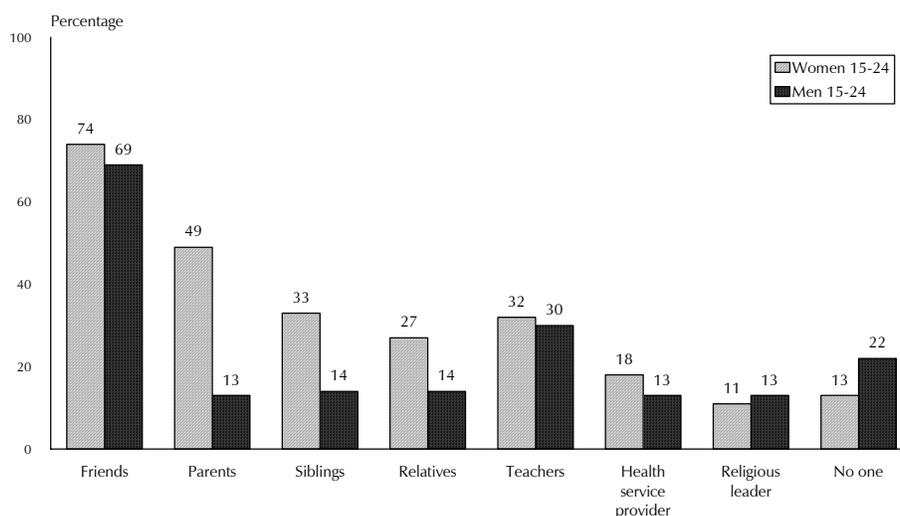
The role of teachers in imparting knowledge about reproductive health is significant; 32 percent of women and 30 percent of men said that they discussed these issues with their teachers. It is not clear whether the respondents actually discussed the topic with their teachers or received the information as part of class instructions. Health service providers and religious leaders play a less significant role as a source of information on reproductive health. Overall, for both women and men, younger, rural, and less educated respondents are less likely than other respondents to discuss reproductive health with anyone.

Table 4.14 Discussion of reproductive health

Percentage of unmarried women and men age 15-24 who discussed reproductive health with specific persons, by background characteristics, IYARHS, 2002-2003

Background characteristic	Persons with whom reproductive health was discussed								Number
	Friends	Parents	Siblings	Relatives	Teacher	Health service provider	Religious leader	No one	
WOMEN									
Age									
15-19	70.8	48.4	30.3	25.3	32.6	15.0	11.5	14.8	1,214
20-24	80.7	50.5	39.5	30.7	30.3	24.5	10.5	10.8	601
Residence									
Urban	77.1	49.4	35.5	28.4	36.1	20.9	11.8	11.5	1,179
Rural	68.5	48.7	29.3	24.6	23.9	13.1	10.0	17.1	636
Education									
Less than completed primary	46.5	38.3	24.6	15.5	2.9	10.0	8.0	33.1	99
Completed primary	62.0	37.9	23.3	13.8	3.4	6.5	6.5	29.6	230
Some secondary	71.8	49.7	29.4	26.6	33.0	16.4	11.0	12.3	872
Secondary +	86.2	54.3	44.1	34.6	45.5	26.4	13.7	5.8	614
Total	74.1	49.1	33.3	27.1	31.8	18.1	11.2	13.4	1,815
MEN									
Age									
15-19	65.4	12.8	12.9	10.7	29.4	10.2	12.0	24.5	1,377
20-24	73.8	13.9	16.6	18.9	29.9	15.8	14.5	18.8	964
Residence									
Urban	73.0	14.8	16.3	17.4	34.0	14.2	13.3	18.0	1,262
Rural	64.1	11.4	12.2	10.3	24.5	10.6	12.7	26.9	1,079
Education									
Less than completed primary	45.7	10.2	10.0	6.2	2.8	8.5	11.9	45.9	173
Completed primary	59.3	12.1	14.5	14.4	6.0	8.7	9.3	34.1	385
Some secondary	68.3	11.7	13.1	10.6	33.3	10.9	13.1	20.4	1,111
Completed secondary	81.3	17.1	17.7	21.8	43.8	18.4	15.3	12.0	673
Total	68.9	13.3	14.4	14.1	29.6	12.5	13.0	22.1	2,341

Figure 4.1
Percentage of Unmarried Women and Men Age 15-24 Who Discussed Reproductive Health with Specific Persons



IYARHS 2002-2003

In the survey, respondents were asked whom they would like to talk to if they wanted more information about reproductive health. Table 4.15 shows the results. For women, apart from their friends (see Table 4.14), almost half (47 percent) would turn to their parents for more information. Friends and health service providers are also preferred by women as a source for information on reproductive health (38 and 35 percent, respectively).

Men, on the other hand, show different preferences with regard to preferred source for more information on reproductive health. While friends play the most important role (44 percent), instead of turning to family members as women do, men are more likely to seek the service of health providers (40 percent). For men, parents and teachers play the same role (18 percent each).

Table 4.15 Preferred source for more information about reproductive health										
Percentage of unmarried women and men age 15-24 who would like further discussion on reproductive health with specific persons, by background characteristics, IYARHS 2002-2003										
Background characteristic	Persons with whom respondent would like to discuss reproductive health									Total
	Friends	Parents	Siblings	Relatives	Teacher	Health service provider	Religious leader	Other	No one	
WOMEN										
Age										
15-19	36.4	50.1	12.0	4.6	23.5	33.9	1.5	1.2	7.7	1,214
20-24	41.7	40.0	12.3	9.0	11.8	37.3	0.7	2.0	8.3	601
Residence										
Urban	40.4	46.7	12.4	5.2	21.9	35.0	1.2	1.7	6.6	1,179
Rural	34.0	46.9	11.5	7.6	15.3	35.1	1.2	1.1	9.2	636
Education										
Less than completed primary	34.0	36.7	9.2	10.2	2.1	9.4	0.7	0.0	26.2	99
Completed primary	42.2	37.5	9.1	6.9	2.2	23.2	2.0	2.5	15.5	230
Some secondary	34.2	50.0	12.5	5.3	25.3	34.9	1.2	0.8	5.2	872
Completed secondary	42.8	47.3	13.1	6.2	20.8	43.7	1.1	2.1	4.7	614
Total	38.1	46.8	12.1	6.1	19.6	35.0	1.2	1.5	7.5	1,815
MEN										
Age										
15-19	42.6	20.6	4.4	4.6	23.8	35.5	4.6	0.5	14.5	1,377
20-24	45.3	13.7	5.2	4.5	9.1	47.3	5.2	2.5	11.6	964
Residence										
Urban	44.1	18.9	4.8	4.7	20.3	43.9	5.5	1.4	10.3	1,262
Rural	43.4	16.5	4.7	4.4	14.8	36.2	4.1	1.2	16.8	1,079
Education										
Less than completed primary	45.7	19.4	4.3	6.3	1.9	21.6	6.5	0.1	26.5	173
Completed primary	44.1	14.9	5.6	6.9	3.6	31.2	2.3	1.3	21.0	385
Some secondary	44.6	18.5	4.0	3.8	26.7	36.0	5.1	0.6	12.3	1,111
Completed secondary	41.6	17.7	5.7	4.1	15.2	57.5	5.5	2.8	7.1	673
Total	43.8	17.8	4.7	4.6	17.7	40.4	4.8	1.3	13.3	2,341

It is worth noting that both women and men consider health service providers as a preferred source of information on reproductive health. The existing policy and strategy of the Ministry of Health in establishing adolescent reproductive health are to 1) integrate adolescent reproductive health programs across programs and sectors, 2) provide information on adolescent reproductive health through networking on basic and referral health care, 3) increase the capability of health providers to provide IEC and counseling on adolescent reproductive health, and 4) providing information to adolescents through health center programs that are specifically designed to serve adolescents (*peduli remaja*).

4.6 INSTRUCTION ON REPRODUCTIVE HEALTH

Schools have not been recognized as a key source of information on reproductive health. In a survey of young adults carried out in 1998-1999, less than one-third of the respondents learned about family planning and reproductive health at school (Achmad and Westley, 1999). This section investigates the role of school in providing information on reproductive health, in particular, the human reproductive system, methods of family planning, HIV/AIDS, and other sexually transmitted infections.

Table 4.16 shows the percentage of unmarried women and men age 15-24 who have attended school by the educational level in which they were taught about reproductive health. In general, instruction related to the specified topics starts at the junior high school level (first three years of secondary education). For instance, 51 percent of women reported receiving information about the reproductive system when they were at this level, and only 5 percent were taught in primary school. The same pattern is true for men: 47 percent were taught in junior high school, and only 4 percent were taught in primary school.

For all topics and at all education levels, the percentage of women who reported receiving instruction on these issues is higher than that of men. Family planning methods are as likely to be taught at the junior high school level as at a higher level; 18 percent of women said that they were taught in junior high school, and the same percentage said that they were taught in senior high school or higher. For men, the corresponding percentages are 14 percent for junior high school and 12 percent in senior high school or higher.

Topic	Women 15-24				Men 15-24			
	Primary school	Junior high school	Senior high school or higher	Number	Primary school	Junior high school	Senior high school or higher	Number
Reproductive system	4.9	51.3	18.8	1,805	3.5	46.9	13.8	2,323
Family planning methods	1.5	17.8	17.9	1,805	1.0	13.9	11.6	2,323
HIV/AIDS	1.9	22.2	28.2	1,805	1.0	17.8	24.3	2,323
Sexually transmitted infections	0.4	9.3	21.1	1,805	0.5	8.6	18.0	2,323