

# Women's Perceptions of the Pill's Potential Health Risks in Sri Lanka

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The birth control pill has been in use for three decades. By the early 1980s, an estimated 50 million women worldwide were using the pill and approximately three times as many had used it at some time in their reproductive years (Kols *et al.*, 1982).

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The pill is considered one of the most systematically evaluated drugs (*cf.* Ory, Rosenfield, Landman, 1980; Potts *et al.*, 1975) and has been unequivocally demonstrated to confer some important health benefits. For younger women in developed countries, recently demonstrated protection against cancers of the reproductive system counterbalances the better known adverse effects of the pill on the cardiovascular system (Fortney, Harper and Potts, 1986). In the developing world, the health benefits of oral contraceptive use may well outweigh the known adverse effects for all age groups. Yet it remains a widely misunderstood contraceptive; neither the positive effects of the pill nor its negative consequences are correctly understood.

A recent study supported by Family Health International and the International Health Foundation in eight developing countries found that the majority of women believe pill-taking poses substantial health risks (FHI, 1986). Similar perceptions are found in developed countries. In 1985, a poll in the United States found that three-fourths of American women of childbearing age shared a similar perception of the risks of pill use (Gallup Organization, 1985). Surveys in five Western European countries found the pill was considered more risky than the IUD or sterilization (Riphagen, 1986).

Rarely have surveys attempted to measure prevailing knowledge of potential health risks. The few studies that have focused on this topic have found that misperceptions and misinformation consistently affect method choice and contraceptive behaviour (Bertrand *et al.*, 1982; DeClerque *et al.*, 1986; Porter, 1984). Measuring the prevailing misperceptions and finding ways to correct them are critical steps towards improving the acceptability and use of all contraceptives, including the pill. In developing countries, perceived health hazards of contraceptive methods have been found to be the major reason for non-use of contraceptives among women who do not want to have more children (Nag, 1985; Bogue, 1983; Schearer, 1983; Nair and Smith, 1984). Assessment of prevailing knowledge and attitudes towards the pill provides the basis for designing appropriate information-education-communication (IEC) programmes about the pill.

This article presents findings based on a representative sample survey of over 3,000 women in Sri Lanka. The main objective is to assess the prevalence of women's knowledge about the effects of pill-use on their health. It is important to investigate what kind of women are most likely to be misinformed about the pill and what adverse effects are wrongly attributed to pill use.

Sri Lanka is an example of a third world country experiencing a sustained decline in fertility despite relatively low levels of socio-economic development (United Nations, 1986). While much of the initial decline in fertility was the result of a steady increase in age at marriage, the more recent decline has mostly

been due to Increasing contraceptive use (Wright, 1970; Alam and Cleland, 1981). This provides a good setting to investigate the extent to which women in a developing country, who are receptive to contraceptive use, perceive the health risks of pill-taking.

The 1982 Sri Lanka Contraceptive Prevalence Survey showed that virtually all of the ever-married women of childbearing age had heard of at least one modern contraceptive method. Further, although approximately 90 per cent of the Sri Lankan women knew of the pill, only 12 per cent (an estimated 265,000) had ever used the pill and only 3 per cent were currently using it. Similarly, the current prevalence of other reversible contraceptives such as IUDs, condoms and barriers has been low, about 7 per cent (SLDCS, 1983). In view of this, the Sri Lanka National Committee for Study of Contraceptive Requirements of Sri Lanka for 1981-1984 stressed the need to enhance the prevalence of reversible contraceptives, particularly IUDs and the pill, in the family planning programmes in Sri Lanka (Ministry of Plan Implementation, 1981).

### **Epidemiologic evidence**

Many epidemiological studies have assessed the relative risks of pill-taking on women's health. The following brief review of the accumulated evidence is limited to those health aspects that are relevant to the study.

*Cardiovascular disease.* Myocardial infarction, stroke and pulmonary embolism are the major serious health risks associated with taking the pill (Stadel, 1981a; 1981b), although the risk is largely restricted to smokers and women over 35 years of age as well as women with hypertension, diabetes and hyperlipidemia.

*Cancer.* The pill's effect on cancer varies with the type of cancer. Women who take the pill are protected from ovarian and endometrial cancers; having about half the risk of never-users (CDC, 1983a; 1983b). While there have been a small number of studies that have shown an association between long-term (greater than eight years among women who *are* less than 25 years old) pill use and breast cancer, the largest case control study carried out by the CDC (1983b) found no increased risk of breast cancer. However, a controversy exists concerning increased risk of cervical cancer among young, long-term pill-users (WHO, 1985). For the vast majority of pill users who are older or have used pills for a shorter time, there appears to be no increased risk of cancer.

*Sexually transmitted diseases.* The pill reduces the risk of gonococcal pelvic inflammatory disease (PID) (Rubin, Ory, Iayde, 1982). PID attributed to chlamydial infection is less severe and less extensive among pill users than among non-hormonal contraceptive users (Wolner-Hanssen, Mardh, Westrom, 1985).

*Sterility.* The pill reduces the risk of female tubal infertility secondary to PID by half; PID is a common cause of female sterility in Africa (Cramer, 1985).

*Birth defects.* The pill has not been consistently associated with any of hundreds of different types of birth defects (Simpson, 1985).

*Weight gain.* Many studies indicate that an equal percentage of pill-takers lose weight as gain weight during pill use (Dickey, 1985).

*Maternal mortality.* The risk of death associated with pregnancy, child-birth and puerperium exceeds the risk of death with oral contraception. The disparity between the two risks is greater in developing countries than in developed countries. The risk of dying from childbearing is 50-100 times greater than the risk of dying from pill-taking in most developing countries (Fortney, Susanti *et al.*, 1986). In Sri Lanka, however, the maternal death rate is lower (fewer than 100 per 100,000 live births nationally, and fewer than 30 per 100,000 in Colombo) than in many other developing countries (Peries, 1983; SLDCS, 1981).

### **Data and methods**

The data come from the 1985-1986 Rural Family Planning Survey (RFP) carried out by the Family Planning Association of Sri Lanka in collaboration with Family Health International. The survey was confined to the rural sector (which constitutes three-fourths of the total population) and covered 17 of the 24 districts in Sri Lanka. Within the 17 districts, the universe of villages which the sample represents is characterized by initial high fertility and family planning services which have been available for at least two years.

Multi-stage stratified random sampling with probability in proportion to size was used in selecting the sample. The eligible respondents were defined as currently married women aged 15-44 years at the time of the survey. The survey covered only the Sinhalese population, which constitutes about three-fourths of the total population of the country. A total of 3,253 respondents were successfully interviewed between August 1985 and February 1986.

The background variables included in the study were age, parity, education, current work status, husband's educational attainment and occupation, the couple's wealth status, and the level of development in the area in which the respondent lives. Wealth status is a composite variable which includes availability of electricity, source of drinking water, type of latrine facility and type of building materials used in the house. The variable "areal development level" refers to clusters of the sample villages classified on the basis of multiple indicators of development (FPASL and FHI, forthcoming).

The survey also collected information about the respondent's knowledge about contraceptive methods (including traditional methods), methods ever used and method(s) currently used by the respondent or her husband. In a special module on the pill in the questionnaire, the respondents were asked a general question on whether they thought pill-taking affected the health of women. Of those who said it detrimentally affected health, further specific questions were asked whether pill-taking causes heart disease, cancer, birth defects, weight gain, permanent sterility, stroke/paralysis and venereal disease. Additionally, a separate question was asked about whether the risk of pill-taking was less than, equal to or greater than the risk of childbearing. These questions were similar to those asked in United States-based and multi-country pill studies.

## Results

Nearly all (98.6 per cent) of the women had heard of the pill. Of those who had heard of it, two-thirds believed that pill-taking has harmful effects on women's health and body. This perception was remarkably constant across all social, economic and educational groups (**table 1**).

Three characteristics are found to be associated with small but interesting differences in the perception of risk of pill-taking. A slightly higher but significant percentage of those who work outside their home on an irregular basis are more likely to say that the pill detrimentally affects women's health.

A possible explanation may be that such women are more likely to interact with varied types of people than housewives or those who work in one place on a regular basis. Therefore, they might be exposed to varying sources of information.

Second, those who have ever used traditional methods (mainly calendar rhythm and withdrawal) are more likely to have a negative perception than those who have never used any traditional or modern method except the pill. Those who have used a traditional method may have done so precisely because they hold negative perceptions about the pill. This appears consistent with the finding in the table that pill users are less likely than any other group of contraceptors to think that pill use is harmful to health.

Third, women living in developed areas are more likely to think that the pill has detrimental effects on health than women living in less developed areas. Data presented in **table 1** do not, however, distinguish between those whose concern about pill safety are correct and those who are incorrect. Since the pill has, as reviewed earlier, both positive and negative effects, the data must be analyzed by specific health problems in order to assess correct and incorrect perceptions.

**Table 1: Percentage of women by their socio-economic and demographic characteristics who believe that pill-taking is detrimental to their health**

Characteristic	Per cent	Number
<b>Woman's age</b>		
15 - 24 years	66.4	420
25 - 34 years	67.0	1 465
35 - 44 years	67.8	1 242
<b>Parity</b>		
0-2	67.1	1 014
3-4	66.4	1 330
5 or more	68.8	784
<b>Woman's education</b>		
None	66.4	238
1-5 years	69.3	1 059
6-9 years	66.0	1 027
10 or more years	66.2	804
<b>Woman's work status*</b>		
Income earning		
Regular salaried	70.6	286
Casual wage	76.6	325
Home based/cottage	69.8	222
No direct earning		
Domestic/farm	65.1	2 295
<b>Husband's education</b>		
None	69.5	118
1-5 years	68.1	999
6-9 years	65.3	1 190
10 or more years	68.6	793

<b>Husband's occupation</b>		
Farmer	65.1	1 112
Labourer	66.2	231
Non-agricultural labour, skilled	66.6	530
Non-agricultural labour, unskilled	61.6	412
Teacher/office worker	70.9	361
Business	65.1	209
Other	12.3	213
<b>Couple's wealth status</b>		
Low	66.4	1 870
Medium	67.1	882
High	71.3	316
<b>Couple's contraceptive use</b>		
Traditional methods*		
Ever used	68.2	2 410
Never used	63.8	718
Modern methods		
Other than pill		
Ever used	68.8	1 303
Never used	69.8	1 204
Pill*		
Ever used	58.8	621
Never used	69.3	2 507
Areal development level*		
Low	62.3	939
Moderate	68.3	1 171
High	70.5	1 017
All	67.2	3 128

**Notes:** \* = Differences among the categories are statistically significant ( $p < 0.05$ ). This table excludes those women who had not heard of the pill ( $n=44$ ) and those who gave the "don't know" response ( $n=81$ ). Number of cases for certain variables may not add to the total because of incomplete information.

**Table 2: Per cent distribution of women's perceptions of the effect of the pill on specified health problems**

Health problems	Yes	No	Don't know	Total
Heart disease	37.6	58.2	4.1	100.0
Stroke/paralysis	15.9	77.7	6.4	100.0
Weight gain	17.5	77.6	4.9	100.0
Cancer	32.3	62.6	5.1	100.0
Sexually transmitted diseases	10.2	82.1	7.7	100.0
Permanent sterility	16.8	79.4	3.8	100.0
Birth defects	31.1	65.1	3.8	100.0
Number	2 102	1025	126	3 253

*Note:* Total percentages may not add to 100 because of rounding.

**Table 2** shows the percentage of the women who believe pill-use causes specific health problems. The seven specified health problems are shown in the table according to whether the perception is correct or not. The first three (heart diseases, stroke/paralysis and weight gain) refer to correct perceptions, while the latter three (birth defects, sterility and venereal diseases) are incorrect perceptions. The perception regarding cancer is placed in the middle since the pill has both adverse and beneficial effects on cancer.

One-third of the women believe that the pill causes heart attack, cancer and birth defects. Only 16-18 per cent of women think that the pill causes weight gain and stroke/paralysis. (Since the vernacular has no word for "stroke," the question asked about the association between the pill and paralysis). About 17 per cent of the women think the pill causes permanent sterility. Only 10 per cent think it causes sexually transmitted diseases.

**Table 3** shows the variation in the perceptions concerning the specified health problems among various sub-groups of women. The groups who were more likely to give "correct" responses to the questions of risk of heart disease, included: less educated women or wives of less educated husbands working as farmers, high parity women and casual wage earners, particularly from the low-wealth status group and living in relatively less developed areas. Thus, there



is an inverse association between the correct knowledge and the level of modernity. This may reflect a generalized fear of ill effects from oral contraception, however, rather than real knowledge of genuine ill effects. This is a rather surprising finding. The higher percentage of women who believe the pill causes cancer also share similar attributes.

There are generally no significant differences between various sub-groups of women who think the pill causes birth defects. But the higher proportion of women who incorrectly believe pill use causes venereal disease and permanent sterility constitutes those who are less educated or are wives of less educated husbands. The data in **table 3** also show that women's age is not a significant factor affecting their perceptions.

The findings shown in **table 3** are based on bivariate relationships; they do not control for the joint effects of other relevant independent variables. Furthermore, they do not indicate the relative importance of each of the significantly related independent variables for each specified health problem. In order to achieve this, step-wise discriminant analysis was carried out. Discriminant analysis is a multivariate statistical technique for investigating the extent to which different population sub-groups diverge from one another or overlap on the basis of a given set of independent variables. The application of "step-wise" procedure identifies the relative importance of all the independent variables included in the analysis (Dillon and Goldstein, 1984). Included in the analysis were all those variables which were found statistically significant in the bivariate results (**table 3**). Furthermore, because of the small number of cases, the "don't know" category was excluded from the analysis.

**Table 4** summarizes the results of the analysis. The ordinal numbers indicate the relative importance of the variables (1= most important, 2= second most important etc.). The last column indicates the percentage of cases correctly classified by the inclusion of the given number of variables referring to each health problem. It shows, for example, that the three independent variables, namely the respondent's education, her status of pill use and her husband's education, correctly classified or "predicted" in 59 per cent of all women in the study the correct vs. incorrect perception of pill use with regard to heart disease. The ordinal number one indicates that women's education is the most important discriminating factor of the three variables included. The number of variables included for each health problem in the table is based on the strength of the discriminating power of all the variables examined.

Women's education and their status of pill use are the two most powerfully and consistently related factors identifying the women who gave "yes" responses from those who gave "no" responses to each of the seven specified health problems (**table 4**). The results also show that when the effects of all the variables are considered simultaneously, neither the husband's education

**Table 3: Per cent of women by their socio-economic and demographic characteristics who think pill-taking causes specific health problems**

Characteristic	Heart disease	Stroke/ paralysis	Weight gain	Cancer	Venereal disease	Permanent sterility	Birth defects	Number
Woman's age+								
15-24 years	36.6	15.2	17.2	29.4	11.0	17.2	32.9	435
25-34 years	38.0	15.9	16.8	31.9	9.4	16.6	31.2	1499
35-44 years	38.8	16.6	18.9	34.7	11.3	17.5	31.4	1 273
Parity								
0-2	35.8*	14.6	18.5	31.0*	10.7*	18.5	32.9	1042
3-4	36.9	15.9	17.0	31.4	9.0	15.4	30.4	1 362
5 or more	43.0	18.3	17.8	37.1	12.3	17.9	31.6	804
Woman's education								
None	49.6*	28.3*	25.0*	37.7*	14.8*	21.7*	35.7	244
1-5 years	46.3	22.0	20.0	36.2	14.1	20.0	33.1	1093
6-9 years	34.0	12.7	15.7	31.0	8.7	14.8	30.0	1051
10 or more years	29.0	9.0	15.1	28.5	6.3	14.5	30.1	820
Woman's work status								
Income earning								
Regular salaried	33.9*	15.4*	18.8	33.9	8.1*	18.5	34.9	298
Casual wage	51.1	25.1	17.8	35.1	16.6	17.2	33.5	331
Home based/cottage	36.3	14.2	16.4	31.4	7.1	12.8	33.2	226
No direct earning								
Domestic/farm	37.0	15.1	17.7	32.3	10.1	17.3	30.6	2 353
Husband's education*								
None	48.7*	24.4*	28.6*	37.0*	14.3*	20.2*	37.0	119
1-5 years	44.4	20.5	17.6	36.6	13.1	19.2	32.7	1035
6-9 years	36.2	13.7	16.5	29.9	9.1	14.3	29.3	1 216
10 or more years	31.9	12.8	18.2	31.1	8.5	17.7	33.0	810

Husband's occupation								
Farmer	40.9*	18.9*	19.1*	33.7	11.4*	16.5	30.0	1 142
Labourer	41.6	18.5	13.5	32.4	14.7	16.4	32.8	238
Non-agricultural labour, skilled	33.9	15.0	13.7	31.1	9.1	16.7	32.8	540
Non-agricultural labour, unskilled	42.4	17.6	19.9	32.8	12.3	19.5	32.0	488
Teacher/office worker	28.2	8.1	18.4	32.5	5.7	17.9	33.9	369
Business	34.3	13.9	13.9	30.6	8.8	13.0	31.0	216
Other	40.9	13.5	22.8	33.5	8.8	19.1	30.2	215
Couple's wealth status								
Low	41.1	18.2*	18.5*	33.8*	11.3	17.2	31.3	1 922
Medium	34.1	13.2	14.1	29.4	9.2	16.0	31.4	901
High	32.5	12.5	22.3	34.8	8.3	18.7	33.0	385
Couple's contraceptive use								
Traditional methods								
Ever used	37.1	15.0	18.1	34.3*	10.1	17.0	32.1	2 466
Never used	39.5	16.4	16.6	27.4	11.3	17.1	29.5	742
Modern methods								
Other than pill								
Ever used	40.6	17.2	18.5	33.7	11.5	16.7*	33.3	1 340
Never used	39.8	18.5	19.2	36.0	12.3	20.3	35.0	1 244
Pill								
Ever used	29.3*	9.0*	13.0*	23.9*	4.2*	11.4*	20.8*	624
Never used	40.2	17.8	18.9	34.8	11.9	18.4	34.1	2 584
Area1 development level <sup>+</sup>								
Low	38.3*	14.8*	22.3*	33.6	9.1*	17.1	26.9	964
Moderate	41.6	18.6	14.2	33.3	12.3	16.2	33.7	1 198
High	34.0	14.4	17.5	31.1	9.3	18.0	33.3	1 045
All	38.1	16.1	17.?	32.7	10.4	17.1	31.5	3 207

\*Notes: + = Case excluded because of incomplete information; ++ = 28 cases excluded because of incomplete information. Table excludes those women who have not heard of the pill (n=45) and 28 cases overall because of incomplete information.

**Table 4: Summary results of the importance of independent variables for specific health problems**

Health problems	Respondent's education	Pill use	Areal development	Husband's education	Husband's occupation	Respondent's work	Parity	Wealth status	Per cent correctly classified
Heart disease	1	2	-	3	-	-	-	-	59.2
Stroke	1	2	3	-	4	-	-	-	62.1
Weight gain	1	2	3	-	6	-	5	4	55.6
Cancer	2	1	-	-	-	-	3	-	54.8
Birth defects	3	1	2	-	-	5	4	-	52.5
Sexually transmitted diseases	1	2	3	-	4	-	-	-	58.3
Permanent sterility	2	1	-	-	-	-	3	4	53.6

*Notes:* - = Indicates the given variable was not found important in the Step-wise Discriminant Analysis. The results were obtained from the application of Step-wise Discriminant Analysis. The number shown indicates the order of importance of each variable included in the equation (1 = most discriminating factor; 2 = second most important, and so on). All the variables with ordinal numbers are significant ( $p < 0.01$ ).

nor the respondent's work status remains a significant variable discriminating the sub-groups of women who have correct vs. incorrect perceptions. In other words, the effects of husband's education and respondent's work status are largely explained away by other more important variables already included in the analysis.

Development level of the area and parity are important in four out of seven specified health problems. The percentage of cases correctly classified ranges from 53 to 63, suggesting that the discriminatory power of the variables included in each model is fairly robust.

For the purpose of examining the perception of the risk of pill use compared with the risk of death due to childbearing, the women were also asked whether they think childbearing is safer than pill-taking. **Table 5** shows that one out of three women think that childbearing is safer than pill-taking. Most notably, this perception does not vary significantly across many sub-groups, except for women's work status, contraceptive use, couple's wealth status and the areal development level.

Women who work as casual wage earners are more likely to think that pregnancy is safer than pill-taking. Only a small percentage of pill users think that childbearing is safer. The associations with the wealth status and development level are less clear. This is probably because the percentages of women in different categories of these variables vary considerably. For example, as many as 10 per cent of the women who live in less developed areas are unsure about the relative safety of the pill. Only one out of four women in the more developed areas said childbearing was safer, while one out of three women in moderately developed areas thought so. These assessments may have reflected experience in the community. For example, a socio-economically better off area usually has lower maternal mortality than less developed areas and maternal mortality is relatively low in Sri Lanka. Because the women's knowledge about



*The mortality rate is relatively low in Sri Lanka especially in socio-economically better off areas and this has an effect on childbearing.*

**Table 5: Socio-economic and demographic differentials in women's perception about whether taking the pill is safer than or less safe than childbearing**

Characteristics	Per cent believing the pill to be				Number
	Less safe	Safer	Equally safe	Don't know	
<b>Woman's age</b>					
15-24 years	31.1	59.2	4.2	5.5	434
25-34 years	30.9	59.5	4.7	4.9	1 496
35-44 years	31.3	59.6	4.2	4.9	1 271
<b>Parity</b>					
0-2	31.9	57.0	4.9	6.2	1 039
3-4	30.0	61.2	4.0	4.8	1 359
5 or more	31.8	59.1	4.6	3.9	804
<b>Woman's education</b>					
None	21.2	63.0	3.1	6.1	243
1-5 years	32.1	56.7	4.9	5.7	1 092
6-9 years	30.2	61.0	3.9	4.9	1 048
10 or more years	31.2	60.2	4.6	4.0	819
<b>Woman's work status*</b>					
<b>Income earning</b>					
Regular salaried	37.5	56.1	4.1	2.3	296
Casual wage	38.4	58.0	3.0	0.6	331
Home based/cottage	34.7	57.8	4.0	3.5	225
<b>No direct earning</b>					
Domestic/farm	28.9	60.3	4.7	6.1	2350
<b>Husband's education</b>					
None	29.4	58.8	4.2	1.6	119
1-5 years	30.9	58.9	4.1	5.5	1 034
6-9 years	29.8	60.7	4.2	5.3	1 213
10 or more years	33.8	58.5	4.5	3.2	808
<b>Husband's occupation</b>					
Farmer	31.8	57.6	3.9	6.7	1 143
Labourer	35.7	51.6	3.8	2.9	238
Non-agricultural labour, skilled	28.1	62.6	4.8	4.5	538
Non-agricultural labour, unskilled	30.7	59.7	4.1	5.5	486
Teacher/office worker	31.8	60.6	4.1	3.5	368
Business	27.4	64.7	5.1	2.8	215
Other	32.7	56.1	7.5	3.1	214
<b>Couple's wealth*</b>					
Low	31.0	59.2	4.3	5.5	1 917
Medium	31.6	61.3	3.8	3.3	900
High	30.4	56.6	6.5	6.5	385

**Table 5: (continued)**

Characteristics	Per cent believing the pill to be				Number
	Less safe	Safer	Equally safe	Don't know	
Couple's contraceptive use					
Traditional methods*					
Ever used	31.4	60.5	4.2	3.9	2462
Never used	29.9	56.1	5.2	8.8	740
Modern methods					
Other than pill					
Ever used	31.7	59.0	4.3	5.0	1 337
Never used	34.4	54.6	4.6	6.4	1 243
Pill*					
Ever used	23.0	70.1	4.5	2.4	622
Never used	33.0	56.9	4.4	5.7	2 580
Areal development level					
Low	29.7	54.6	5.6	10.1	964
Moderate	35.8	58.9	3.0	2.3	1 197
High	27.0	64.6	4.9	3.5	1041
All	31.1	59.5	4.4	5.0	3 202

*Notes:* \* = Differences among the categories are statistically significant ( $p < .05$ ). This table excludes those women who have not heard of the pill ( $n=44$ ) and 51 cases overall because of incomplete information. The number of cases for certain variables may not add to the total because of incomplete information.

the relative risk of childbearing and pill use vary little by their socio-economic and demographic characteristics, the multivariate analysis was considered unnecessary.

### Discussion

This article has analyzed women's knowledge and attitudes about the potential health risks of oral contraceptives. Two-thirds of rural Sri Lankan women think that pill-taking has harmful effects on their health. One out of three women believe that the pill causes heart disease, cancer or birth defects.

One of the most surprising findings is that there is generally an inverse relationship between the modernity status of the women and their correct perceptions of the potential health risk of pill use with regard to cardiovascular disease and stroke.

A significantly higher proportion of women who are more educated or have more educated husbands, women who work in non-traditional sectors and live in relatively more advanced areas hold more incorrect views than their counterparts. In contrast, a higher percentage of less educated women incorrectly believe that the pill causes venereal disease, permanent sterility and birth defects.

Overall, the results showed that women's educational level and previous use of oral contraceptives are consistently and strongly associated with their knowledge and attitudes. This underscores the importance of investigating the perceptions about the pill among various sub-groups of women. However, there is very little difference in the proportion of women who express concern for actual pill risks and those who express concern for risks that have not been demonstrated by research. This suggests that "knowledge" of actual risks associated with oral contraceptive use is the result of a generalized and uninformed fear rather than informed opinion.

Those women who have used the pill appear less concerned with the potential risks of heart disease and stroke than those who have never used the pill. It could not be determined whether this lessened concern is due to education about the pill among ever-users or to a general lack of concern about health effects which would facilitate a woman's decision to initiate and continue pill use.

It must be noted that the way questions are asked of the respondents does affect the responses. It is also possible that some women in developing countries may not be aware of certain types of health "problems" specified in this as well as in other similar survey research.

More importantly, the perceptions of the potential health "risks" are influenced by cultural factors also. For instance, the potential effect of pill use on weight gain is not necessarily regarded as a "risk" in many developing countries; rather weight gain is often viewed positively. Similarly, in many countries, heart disease is not the serious public health problem it is in Western countries. Therefore, not all of the aspects of the data analyzed in this article may be of equal relevance and significance in every developing country.

Despite this limitation, the overall implications of the study's findings are clear: the prevalence of misinformation about the potential health risks of the pill is very high in Sri Lanka, a country where people are receptive to family planning programmes and where the educational attainment of women is considerably higher than in many other developing countries.

This study reinforces the critical need for IEC programmes to help to eliminate or minimize the prevailing misinformation.



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