Prevalence and risk factors of symptoms related to reproductive tract diseases among rural women of northern Haryana

Rajesh Kumar • Arun K Aggarwal
Dept. of Community Medicine, Post-graduate Institute of Medical Education and Research, Chandigarh 160012.

Summary: To estimate prevalence and risk factors of symptoms related to the diseases of reproductive tracts, 600 ever-married women of 15-44 years were interviewed by a female social worker in four villages of Haryana state. Prevalence of reported symptoms were: excessive vaginal discharge 18.2%, menstrual disorders 28.5%, pain while passing urine 3.8%, 'something' coming out from vagina 5.3%, lower abdominal pain 17.7%, and low backache 38.5%.

Logistic regression analysis revealed significantly higher odds ratio for menstrual disorders (OR=2.1), vaginal discharge (1.7), pain in lower abdomen (2.2) and backache (2.0) among contraceptive users. Odds ratio were significantly higher for pain, while passing urine among women of lower socioeconomic status. The odds ratio was higher for lower abdominal pain among respondents aged 25 years or more, whereas it was lower among women of higher parity. Odds ratio was higher for menstrual disorders among those who had an abortion. Odds ratio were higher for pain in lower abdomen, low backache, and 'something' coming out of vagina among those who had history of stillbirth.

Prevalence of symptoms related to reproductive tract diseases is high among rural women of northern Haryana. The association between reproductive morbidity and contraception needs further study.

Introduction

Information on the magnitude of reproductive health problems is scarce in India. Though clinical and laboratory examination provides the best assessment of reproductive disease conditions, application of these methods in the community is difficult and expensive. Moreover, the low participation rate of women in such studies in developing countries is another problem.

Questionnaires that are designed to seek information on symptoms is another alternative which has been tried in child health surveys. Self-report of women about the symptoms related to the reproductive tracts is an indicator of their need for care. Therefore, this information can be used in planning reproductive health services in the community. This study aimed at finding out the prevalence and potential risk factors of symptoms related to reproductive morbidity.

Material and methods

This study was carried out in four villages of Raipur Community Development Block of district Ambala, Haryana, One of the selected villages had a primary health centre, another had a sub-health centre, and two villages were without any health facility. All ever-married women aged 15-44 years were included in the study from three smaller villages whereas from the sub- health centre village, which was larger, a systematic random sample was done to select every second eligible woman. Thus, 600 respondents were interviewed by a female social worker using a

structured interview schedule.

The interview schedule consisted of questions on demographic, social, economic, past obstetrical history, contraception, and current morbidity. The following direct questions on symptoms related to reproductive morbidity were asked: excessive vaginal discharge, whether foul smelling, blood stained, or with itching; menstrual disorders-delayed, early, shortened, prolonged, excessive bleeding, scanty, pain during or before periods; pain while passing urine; pain in lower part of belly; pain in lower part of back; and 'something' coming out of vagina.

The prevalence of symptoms was analysed according to the socioeconomic status, age, parity, history of stillbirths, abortions, and use of contraceptives. Education, occupation and income were used to compute the socioeconomic score. Socioeconomic status was ranked into two categories. i.e. low and high. Those who had scored below or equal to the mean score were included in the low socioeconomic status. Chi-square was applied to test the differences in the prevalence of symptoms among various groups. Logistic regression analysis was performed to estimate the association of each of the variables mentioned above with the symptoms reported by women.

Results

Of the 600 women surveyed, 92% were Hindu, 6% were Muslim, 2% were Sikh, and 21% belonged to scheduled castes. Forty-nine per cent of the respondents and 72% of their husbands were literate. Forty per cent had nuclear family. Majority (93%) were housewives. Occupation of husbands was labour in 40%, agriculture in 16%, and service in 25%. The source of drinking water was the well for 41%, the tap for 35% and the hand pump for 35%. Only 15% had latrines.

This study revealed high prevalence of symptoms associated with reproductive morbidity (Table I). Sixty-one per cent women had been suffering from these symptoms, with an average of 2 symptoms per woman. The percentage distribution of symptoms according to the characteristics of women is presented in Table II.

Table I

Self-reported symptoms related to reproductive tract diseases.

Symptoms	No. (%)
Excessive vaginal discharge	109 (18.2)
Blood stained	13
Foul smelling	64
With itching	11
Blood stained with itching	2
Foul smell with itching	19
Pain while passing urine	23 (3.8)
'Something' coming out of vagina	32 (5.3)
Pain in lower abdomen	106 (17.7)
Pain in lower back	231 (38.5)
Menstrual disorders	138 (28.5)
Irregular	55
Pain during menstruation	21
Excess bleeding	15
Irregular and painful	6
Irregular and excess bleeding	8
Painful and excess bleeding	3
Irregular, painful, excess bleeding	4
Scanty	19
prolonged	7
Not applicable*	116

*Who had menopause / amenorrhoea.

Logistic regression analysis results are shown in Table III. Odds ratio for reported symptoms of menstrual disorders, vaginal discharge, pain in lower abdomen, and backache were significantly higher among contraceptive users compared to non-users. Odds ratio for pain while passing urine was three times higher in women belonging to lower socioeconomic status ($p<0.05$). Odds ratio for the symptom of lower abdominal pain was significantly higher among women aged more than 25 years, whereas it was significantly lower among women of higher parity

Table II

Percentage distribution of symptoms related to reproductive tract diseases according to the characteristics of women

Characteristics	No.	Menstrual disorders	Excessive vaginal discharge	Pain while passing urine	'Something' coming out of vagina	Pain in lower abdomen	Low back ache
Socioeconomic Status							
Low	291	23.9*	17.2	5.5*	5.8	18.2	40.2
High	309	32.9	19.1	2.3	4.9	17.2	36.9
Age in years							
15-24	182	18.5**	18.1	3.8	1.1**	12.1*	28.0***
25-34	269	32.2	20.8	3.3	5.9	18.6	42.0
35-44	144	31.1	13.9	4.9	9.0	22.2	43.1
Parity							
0-1	150	22.3	18.7	3.3	0.7**	16.7	24.7***
2-3	264	29.5	19.7	4.9	6.4	16.7	40.5
4+	186	31.2	15.6	2.7	7.5	19.9	46.8
Abortion							
No	499	24.3*	17.0	3.8	4.6	17.6	37.7
Yes	101	48.8	23.8	4.0	8.9	17.8	42.6
Still birth							
No	553	28.4	17.4	3.8	4.5***	16.6*	35.8***
Yes	47	29.4	27.7	4.3	14.9	29.8	70.2
Contraception							
No	263	20.1***	15.6	3.0	2.7**	12.9***	28.1***
Yes	337	33.9	20.2	4.5	7.4	21.4	46.6

p value * <0.05 **<0.01*** <0.001

(1+). Odds ratio for symptoms related to menstrual disorders were significantly higher among those who had abortion. The odds ratio for pain in lower abdomen, low backache, and 'something' coming out of vagina were significantly higher among those who had stillbirth.

Discussion

The survey revealed that 61% women were suffering from symptoms associated with reproductive morbidity. Bang et al (1989) from Gadchiroli (Maharashtra) reported that 55% women above 13 years had gynaecological complaints. However, clinical examination showed that 92% of them were suffering from gynaecological disorders. Whereas, in a study from Bangladesh, 22% of women surveyed reported symptoms of reproductive infections, and of the symptomatic women examined 68% had clinical or laboratory evidence of infection (Wasserheit et al 1989). In a study from Giza (Zurayk et al 1995), women's report of vaginal discharge had a sensitivity of 91%, specificity of 61%, and positive predictive value of 86%. Sensitivity for severe prolapse was 50%, specificity was

Table III

Logistic regression analysis of symptoms related to reproductive tract diseases according to the characteristics of women

Characteristics	Menstrual disorders	Excessive vaginal discharge	Pain while passing urine	'Something' coming out of vagina	Pain in lower abdomen	Low back ache
Socioeconomic status						
Low	0.9	0.95	3.0*	1.2	1.1	1.1
Age in years						
15-24@						
25-34	1.9	1.2	0.7	2.8	2.2*	1.2
35-44	1.8	0.7	1.3	3.8	2.6*	1.0
Parity						
0-1@						
2-3	0.6	0.7	1.1	3.5	0.4*	1.2
4+	0.5	0.6	0.4	3.0	0.4*	1.4
Abortion						
Yes	1.9***	1.2	1.1	1.3	0.9	1.0
Still births						
Yes	1.0	2.0	0.9	2.9*	2.3*	4.2***
Contraception						
Yes	2.1**	1.7*	1.9	1.7	2.2***	2.0***

@ Reference categories.

p value * <0.05 ** <0.01 *** <0.001

76%, and positive predictive value was found to be 66%. The symptoms reported by women, therefore, may not correspond to the medical diagnosis. However, self-reports of symptoms about the reproductive health problems is an indicator of the need for services among various groups of population and therefore, is useful in planning reproductive health care services in the community. Significantly higher reports of symptoms of reproductive illness among contraceptive users is of serious concern. Others have also reported a similar association (Wasserheit et al 1989; Bhatia and Cleland 1995). Contraceptive methods are perceived by the women to be the 'cause' of their symptoms related to reproductive tracts. Although most doctors think that these complaints are psychological in nature since the reported symptoms appear to be vague such as pain in abdomen and back it is also possible that these women are suffering from chronic infection. Less than optimal aseptic conditions in family planning camps could be responsible for this. We could not investigate the sexual behaviour of women, i.e. number of sexual partners. Therefore, the association between laboratory confirmed reproductive morbidity and contraception should be studied further after taking into consideration the sexual behaviour of the couple. Association of reproductive morbidity with occurrence of stillbirth, abortion, age, and parity could be due to the compli-

cations associated with delivery. Relation of pain while passing urine with socio-economic status may reflect more chances of infection among women of lower socioeconomic status due to unsatisfactory personal hygiene.

It is concluded that the prevalence of symptoms related to reproductive tract diseases is quite high among rural women of northern Haryana. Rural health services should give more attention to the prevention and treatment of diseases related to reproductive tracts. For management of vaginal discharge, syndromic approach could be used in situations where complete laboratory diagnosis is not possible (Kumar et al 1997).

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