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# Reproductive and Sexual Health Problems as Perceived by Women and Men in a Rural Area of Bangladesh



Abbas Bhuiya  
Ayesha Aziz  
SMA Hanifi



CENTRE  
FOR HEALTH AND  
POPULATION RESEARCH

International Centre for Diarrhoeal Disease Research, Bangladesh

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*(See inside of the back cover...)*

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Abbas Bhuiya  
Ayesha Aziz  
SMA Hanifi



**ICDDR,B: Centre for Health and Population Research**  
Mohakhali, Dhaka 1212, Bangladesh

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**Editor**

MA Rahim

**Managing Editor**

M Shamsul Islam Khan

E-mail: msik@cholera.bangla.net

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MA Rahim

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International Centre for Diarrhoeal Disease Research, Bangladesh

Mohakhali, Dhaka 1212, Bangladesh

Telephone: 871751-60 (PABX); Fax: (880-2) 883116, 886050

Telex: 675612 ICDD BJ; Cable: CHOLERA DHAKA

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## ABSTRACT

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The study was carried out in three unions of Chakaria thana, a remote rural area of Bangladesh, to know the local names of the reproductive/sexual health problems and to reveal the perception of similarity and severity of the diseases.

Freelisting and pilesorting techniques were used in data collection. Average salience and severity was calculated to assess the importance of the diseases. Multidimensional scaling technique was used for studying the perceived similarity of the diseases. Data were collected from male and female key informants of reproductive age.

The respondents were found to be aware of various types of reproductive/sexual health problems in the study area, and considered that the number of sexual/reproductive health problems is smaller among men than women. The total number of male and female diseases mentioned by the informants was 14 and 42 respectively. Among the male diseases, *dhatu(sta)* (spermatorrhoea) scored the highest salience index, followed by *gonorrhoea*, *okkham* (impotent), *ekshira/bakshira* (hernia/hydrocele), and *purushangey ghaa* (ulcer in the genitalia). Among the female diseases, *sada srab* (white discharge) scored the highest salience index, followed by *mashikey gulmal* (menstrual problem), *sutika* (post-partum diarrhoea and burning in the hand and feet), *sharam jaigai ghaa* (ulcer in the area of shame), *shwapnadosh* (emission of vaginal fluid at night in dream), and *adina nasta howa* (abortion). There were indications of variation in perception among males and females about the importance and severity of the male and female diseases. In case of both male and female diseases, a pattern of clustering of various diseases on the basis of perceived similarity was revealed.

The local names of the sexual/reproductive health problems can be used in further studies. Intervention priorities can be determined on the basis of the perceived importance and severity of the diseases. Both men's and women's perceptions about the diseases can be used in designing health education curricula and material.

*Keywords:* Sexual health, reproductive health, perception, Bangladesh



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# INTRODUCTION

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In the recent past, concern has been intensified about the improvement of sexual and reproductive health of men and women (1, 2, 3, 4). Unfortunately, in a developing country, like Bangladesh, very little is known about the nature and magnitude of the problems relating to sexual and reproductive health. Sporadic studies, mostly carried out in clinical setups, are indicative of the presence of some problems (5, 6, 7). Lack of suitable methods to assess the prevalence and nature of the sexual and reproductive health problems is one of the important factors responsible for the existing information gap. Despite recent development of syndromic approaches for assessment of the prevalence of some of the sexual and reproductive health problems and their management (8), widespread application of these approaches remained to be a challenge. This may, to some extent, be due to the fact that the issues involve inquiry on culturally sensitive topics and taboos, and the vocabulary used in communication is unfamiliar to the community members. In addition, the presentation and organization of communication materials commonly in use rarely make use of the perception of the community members about the sexual and reproductive health problems. Thus, there is a need to know about the local names of the sexual and reproductive health problems and also the perceptions of the community members about these can meaningfully be combined with the biomedical models.

This study was undertaken in a rural area of Bangladesh, specifically to know about the local names of the sexual and reproductive health problems and the perception of men and women about these by applying social science research methods. It was expected that the findings of the study will be of help in designing interventions to control reproductive and sexual health problems. Furthermore, the experiences gained from this study will also be useful in designing further studies on the topic.

## Materials and methods

### *The study area*

Data were collected from three unions in Chakaria thana under Cox's Bazar district, situated at the south-east part of the country. Chakaria has a tropical monsoon climate with heavy rainfall during May-September. The climate is mostly dry during the remainder of the year, January being the coolest month with the lowest average temperature of 10 °C.

The location of Chakaria itself has made it very vulnerable to cyclones and tidal bore, in addition to regular monsoon flooding. Health service statistics, available in the Thana Health Complex for the year 1994, suggest that diarrhoeal diseases, acute respiratory infections, and malaria are the most important health problems (9). A national survey on iodine deficiency disorder (IDD) carried out in 1993, estimated an IDD prevalence rate of more than 60 per cent among the inhabitants of the hilly zone of Chakaria, and 30 to 49 per cent among the inhabitants of the low-lying area (10).

Like other parts of Bangladesh, the study area is characterized by subsistence economy with dominance of agricultural activities by traditional means. Nearly 40 per cent of the household heads are engaged in agricultural activities as day-labourers, 25 per cent in farming for themselves, 20 per cent in small trades, 10 per cent in low-paid jobs, and 5 per cent in self-employment. Female employment has been very rare in the locality.

The study site, one of the most conservative areas in terms of religion and openness to modern ideas, is also backward in terms of modern education. Nearly, half of the males and two-thirds of the females, aged over six years, had never been to school. Only seven per cent of the male and two per cent of the female population had more than ten years of schooling. Ninety-one per cent of the population in the study area are Muslim, while the remainders are either Hindu or Buddhist. More details about the study area can be found elsewhere (11).

Since 1994, the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) has been carrying out an experiment to promote self-help for health among the villagers of the present study unions. The project has been working through the existing indigenous village-based self-help organizations to identify health problems, define, plan, and implement possible actions by using participatory research methods. The self-help organizations identified male and female, and student health volunteers who have been trained by the members of the project staff to communicate health messages in various fora. Within two years of the project activities, the self-help organizations were able to organize dissemination of health messages by their members and could establish six village health posts to host some health activities at the village level without any material support from the Project (12).

### *Method of data collection*

Data were collected by using qualitative research methods in an iterative fashion. Firstly, a list of key informants was prepared with the help of the members of the project staff working in the field. The key informants included both male and female health volunteers from the three unions and others who were thought to be

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knowledgeable about the health problems and would also be open to discuss the subject with the researchers. Data were collected by the researchers themselves. The male informants were interviewed by the male researchers with social science backgrounds, while the female informants were interviewed by a female team member who was a medical graduate with training in obstetrics and gynaecology.

The steps of data collection involved a freelisting of reproductive/sexual health problems experienced by women (*mayeli roog*) and men (*puroshali roog*) of the locality. Both male and female informants were asked to name the known reproductive/sexual health problems of men and women and their local names were asked for. The names of the diseases were listed in the order mentioned. In addition to the above, the informants were also requested to provide a description of the symptoms of the diseases.

After freelisting, the informants were asked to group the diseases into piles of cards, carrying the names of the diseases, as they wish. Subsequently, the diseases were ranked by the informants, according to their perceived severity by using a three-point scale: (1) very dangerous, (2) dangerous, and (3) not so dangerous. Data collection from the additional informants was stopped as soon as the listing of diseases was thought to be completed, i.e. no new diseases were mentioned by the informants. The above methods have recently been extensively used in India (13). Details of the methods used can be found elsewhere (14).

### *Method of data analysis*

The data from the freelisting were analyzed to calculate the average rank of the diseases and their salience (15). In doing so, the nearly similar names with similar symptoms were merged together. The order of a disease in which it was mentioned by an informant was considered to be its rank. Such rank for a disease was averaged across the informants to obtain the average rank of a disease.

The salience was calculated by using the formula given below:

$$S_j = (n-r_j)/(n-1)$$

Where  $S_j$  is the salience of item  $j$ ;  $r_j$ =position of item  $j$  in the list, and  $n$ =number of items mentioned by an informant.

An average salience of an item is the arithmetic mean of salience across all the informants. The value of salience indicates the importance of an item as reflected by the order of mention after adjusting for the number of items within which the order was considered. The value can vary between 0 and 1. A higher value represents more importance than a lower value.

Cognitive map of the respondents in relation to the diseases was assessed by multidimensional scaling techniques by using data from the pilesorting. The multidimensional scaling was done with two dimensions and then plotted for a clear understanding. The average non-metric distances based on pilesorting were used for the multidimensional scaling.

The severity-ranking data were analyzed by comparing the average severity indices. All the above analyses were done for male and female diseases separately.

The data were analyzed by using ANTHROPAC (16, 17, 18) and SPSS/PC (19) software.

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# RESULTS

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## Background characteristics of the informants

After interviewing nine female and nine male key informants, two complete lists of male and female diseases were obtained. The age range of the female respondents varied between 18 and 42 years, with an average age of 31 years. All the female informants were housewives, except one who was a community health worker. Three of the female informants were illiterate but the others had been to school. Of them, one had primary level of schooling while others had more than primary level of schooling. The female informants were mostly Muslim, only two were Hindu.

The age range of the male informants varied from 35 to 53 years, with a mean age of 41 years. Of the male informants, three were village allopathic healthcare providers, one was a school teacher, two were businessmen, one was a job holder, and the other was a farmer. Only one of the male informants was illiterate but the rest had more than five years of schooling. Three of the male informants were Hindu, and others were Muslim.

## Male reproductive/sexual health problems

Table 1 presents the local names of all the male reproductive/sexual health diseases mentioned by male and female respondents/informants with symptoms and approximate biomedical equivalence. The male and female informants mentioned 14 different reproductive health diseases of men. Of these, 7 were mentioned by both male and female informants; three by male only, and four by female only. The ones mentioned by both male and female respondents included symptoms close to spermatorrhoea/urethral discharge—*dhatu(sta)*; inguinal hernia, hydrocele, spermatocele, vericela, pyocele (*ekshira/bakshira/hernia*); spermatorrhoea (*shwapnadosh*); gonorrhoea; syphilis, impotent (*okkham*); scabies, boil, syphilis (*purushangey ghaa*). The ones mentioned by the male respondents included urge for urination when in water; giddiness, vertigo (*mathha ghura*); and thin semen (*beerzwa torol howa*). The ones mentioned by only female informants included swelling of the penis, hydrocele, elephantiasis (*purushanga pholey jaowa*); urethral stone, renal stone (*shila roog*); over-sex (*sex beshi*); and urinary tract infection (*kharai*).

It is interesting to note that the four diseases mentioned only by male respondents are less severe in nature and can easily avoid women's attention. It was also observed that, despite repeated focus on male reproductive/sexual health

Table 1. Local names of male reproductive health problems, their symptoms, approximate biomedical equivalence and average rank and salience in Chakaria, Bangladesh

Local name (Biomedical equivalence with similar symptoms)	Symptom	No. of respondents		Average severity rank			Average salience		
		M	F	C	M	F	C	M	F
1. Dhatu(sta) (Spermatorrhoea)	Involuntary frequent emission of semen	5	7	1.67	1.40	1.86	.83	.86	.80
2. Ekshira/ bakshira/ hernia (Uni/bilateral hydrocele spermatocele, vericocele, pyocele, inguinal hernia)	Swelling in one or both sides of the scrotum/ genitalia	2	8	1.86	1.45	1.67	.48	.33	.53
3. Shwapnadosh (Spermatorrhoea; nocturnal emission of semen)	Involuntary emission of semen while sleeping and often accompanied with dream	6	2	2.00	1.83	2.50	.39	.52	.00
4. Gonorrhoea	Discharge of pus through urethra	5	2	1.29	1.40	1.00	.67	.68	.65
5. Syphilis	Ulcer in genitalia	4	2	1.17	1.25	1.00	.30	.34	.23
6. Okkham (Impotent)	Unable to do intercourse	3	2	2.20	2.33	2.00	.51	.55	.45
7. Purushangey ghaa (Syphilis, boil, scabies)	Ulcer in genitalia	1	2	2.00	2.00	2.00	.33	.00	.50
8. Purushanga phule jaowa (Hydrocele, swelling of the penis, elephantiasis)	Swelling of male genitalia	-	1	-	-	1.00	-	-	.75
9. Shila roog (Renal stone, urethral stone)	Painful urination, passes concentrated urine, blood in urine due to stone in the urethra	-	1	-	-	1.00	-	-	.00
10. Sex beshi	Very frequent sexual urge	-	1	-	-	1.00	-	-	.25
11. Kharai (Urinary tract infection)	Burning sensation during urination, passing concentrated urine	-	1	-	-	2.00	-	-	.50
12. Panitey namley peshab asha	Uncontrollable urge for urination while in water	1	-	-	3.00	-	-	.75	-
13. Mathha ghura (Vertigo/ giddiness)	Giddiness	1	-	-	2.00	-	-	.25	-
14. Beerzwa torol howa	Thin semen	1	-	-	1.00	-	-	.00	-

*M refers to diseases mentioned by males only; F refers to diseases mentioned by females only; C refers to diseases mentioned by both males and females and to combined rank*

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problems, the male key informants tended to report other diseases, and they were found to be shy to talk about male reproductive/sexual health problems.

The number of male diseases mentioned by both male and female respondents did not vary much. On an average, the male informants mentioned 3.3 male reproductive health problems with a range of 1 to 6. On the other hand, the female informants mentioned 3.2 reproductive health problems with a range similar to that by males.

In terms of the average salience (which represents the importance of diseases) for combined responses by male and female, *dhatu(sta)* ranked the highest, followed by gonorrhoea, *okkham*, *ekshira/bakshira/hernia*, and *purushangey ghaa* among the diseases which were mentioned by more than one respondent. Of the same diseases, syphilis was considered to be the most severe, followed by gonorrhoea, *ekshira/bakshira/hernia*, *dhatu(sta)*, *purushangey ghaa*, and *okkham* (Table 1).

Importance of the seven male diseases mentioned by more than one respondent and measured by salience, somewhat varied depending on the sex of the respondents except *dhatu(sta)*. *Dhatu(sta)* had the highest average salience score given by both male and female respondents. The male respondents identified gonorrhoea as the second highest important disease, followed by *okkham*, *shwapnadosh*, syphilis, *ekshira/bakshira/hernia*, and *purushangey ghaa*. On the other hand, the female respondents also considered gonorrhoea the second highest important disease, followed by *ekshira/bakshira/hernia*, *purushangey ghaa*, *okkham*, syphilis, and *shwapnadosh*.

Perception about the severity of the above seven diseases was also found to vary by sex of the respondents. According to the male respondents, syphilis was the most severe followed by gonorrhoea and *dhatu(sta)*, *ekshira/bakshira/hernia*, *shwapnadosh*, *purushangey ghaa*, and *okkham*. On the other hand, the female respondents considered gonorrhoea and syphilis the most severe, followed by *ekshira/bakshira/hernia*, *dhatu(sta)*, *okkham*, *purushangey ghaa*, and *shwapnadosh*.

### **Perceived similarity of the male reproductive/sexual health problems**

The results of piling and multidimensional scaling of the male diseases are presented in Figure 1. The diagram shows seven clusters of diseases. *Dhatu(sta)* turned out to be a distinct disease without any perceived similarity with the other diseases. Gonorrhoea and syphilis were clustered together, and both the diseases were believed to be common among "bad people" who go to women other than

Figure 1. Cognitive map of the male reproductive and sexual health problems\*

10 2	12 6 13 9
11 14 8 3 7	1 4 5

List of diseases in major clusters: : (Numbers correspond to the serial numbers in Table 1)

[1= Spermatorrhoea]

[4=Gonorrhoea; 5=Syphilis]

[3= Spermatorrhoea/nocturnal emission of semen; 7=Syphilis, boil, scabies]

[11= Urinary tract infection; 14= Thin semen]

[9= Renal stone, urethral stone; 13= Vertigo/giddiness]

[8= Hydrocele, swelling in penis, elephantiasis]

[6= Impotence; 12= Uncontrollable urge for urination while in water]

[2= Uni/bilateral hydrocele spermatocele, vericocele, pyocele, inguinal hernia; 10= Very frequent sexual urge]

\*reproduced from SPSS/PC output



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their wives. *Swapnadosh* and *purushangey ghaa* were also grouped together with *purushanga phuley jaowa*. It was believed that too much spermatorrhoea causes ulcer in the genitalia. *Kharai* and *beerzwa torol howa* were perceived to be similar. Repeated urinary tract infections were believed to cause thin semen. *Okkham* and *panitey namley peshab asha* were grouped together with the nearest cluster of *shila roog* and *mathha ghura*. Uncontrollable urge for urination, especially when in water, according to the respondents, reflects weak reproductive organ which eventually may lead to impotence. *Sex beshi* was somewhat near to *ekshira/bakshira/hernia*. The respondents opined that over-sex is bad and may lead to hernia.

### Female reproductive/sexual health problems

Forty-one different female reproductive diseases were mentioned by the male and female respondents. Of these, 14 were mentioned by both male and female respondents, 23 by the females only, and the remaining four by males only. Table 2 presents all the male diseases mentioned by male and female respondents with their average severity and salience rank.

The 14 diseases mentioned by both male and female respondents included indications, like abnormal uterine bleeding/dysmenorrhoea (*mashikey gulmal*), leucorrhoea/candidiasis/trichomoniasis/pruritus vulvae (*sada srub*), post-partum diarrhoea and calcium deficiency (*sutika*), uterine/vaginal prolapse (*phulghar ber howa*), eclamsia/cerebro-vascular accident/thrombo-embolism/pulmonary embolism (*biola peera*), syphilis/boil (*sharam jaigai ghaa*), gonorrhoea, vertigo/giddiness (*mathha ghura*), syphilis, *prashaber por pa phula*, *swapnadosh*, cervical erosion/cervicitis/cervical cancer (*foaria ghaa*), abortion (*adina nasta howa*), and *shahabashey okkham*. The ones mentioned only by the female respondents included symptoms, like gestational oedema (*ajat*), pelvic inflammatory diseases (*ajaler kaori*), pain in lower abdomen (*tal pethey bethha*), post-partum haemorrhage (*prashaber porey rakta beshi jaowa*), post-delivery wasting (*prashaber porey sharir bhengey jaowa*), calcium deficiency (*hat-pa jalapura*), and retained placenta (*prashber por phul atke jaowa*). The ones mentioned by the male respondents only included breast engorgement (*dudh peera*), anaemia (*rakta sunnyata*), eclamsia, and headache/migraine (*mathha kamrani*).

Among the diseases mentioned by both male and female respondents, the salience index was the highest for *sada srub* (.77), followed by *mashikey gulmal* (.65), *sutika* (.61), *sharam jaigai ghaa* (.61), *shwapnadosh* (.61), *adina nasta howa* (.61), *phulghar ber howa* (.56), syphilis (.47), *prashaber por pa phula* (.46), gonorrhoea (.45), *foaria ghaa* (.41), *mathha ghura* (.38), *biola peera* (.29), and *sahabashey okkham* (.22).

There had been some variations in salience index of diseases as reported by men and women. Out of the diseases, 11 were mentioned by at least two male respondents and 21 by at least two female respondents. Among the diseases that were mentioned by at least two men, *shwapnadosh* had the highest salience, followed by *sutika*, *phulghar ber howa*, *mashikey gulmal*, *sada srub*, gonorrhoea, syphilis, *foaria ghaa*, *baaza* (sterility), *biola peera*, and *sahabashey okkham* (inability to perform intercourse). Of the 21 diseases mentioned by at least two female respondents, *sada srub* was the most important, followed by *adina nasta howa*, *mashikey gulmal*, *sharam jaigai ghaa*, *shahabashey okkham*, *ratat mura*, *durbalata*, *ajat*, *talpethey bethha*, etc. Table 2 presents the diseases with their salience and severity rankings.

According to average severity ranking done irrespective of the sex of the respondents, the most severe one was *adina nasta howa* (1.00), followed by *prashaber por pa phula* (1.33), *sharam jaigai ghaa* (1.40), gonorrhoea (1.50), *phulghar ber howa* (1.60), *sada srub* (1.62), *sutika* (1.64), *biola peera* (1.67), syphilis (1.75), *foaria ghaa* (2.00), *mashikey gulmal* (2.08), *mathha ghura* (2.25), *shwapnadosh* (2.33), and *shahabashey okkham* (2.50).

Variations in perceived average severity by sex of the respondents were also observed. Among the diseases mentioned by more than two male respondents, *biola peera* was considered the most severe, followed by gonorrhoea, *mashikey gulmal*, syphilis, *baaza*, *sutika*, *phulghar ber howa*, *shwapnadosh*, *foaria ghaa*, *sahabashey okkham*, and *sada srub*. Of the diseases mentioned by more than one female respondent, *adina nasta howa* and *prashaber por beshi rakta jaowa* were considered the most severe followed by *sada srub*, *biola peera*, *sharam jaigai ghaa*, *prashaber por jor*, *phulghar ber howa*, *ajat*, *prashaber por pa phula*, *sutika*, syphilis, *durbalata*, and *ratat mura*.

### Perceived similarity of the female reproductive/sexual health problems

The results of pilesorting and multidimensional scaling of the female diseases have been presented in Figure 2. The diagram shows three distinct clusters of diseases. The largest cluster with 14 diseases includes varieties of conditions women usually complained of. The second cluster above the largest cluster mostly includes conditions suffered during pregnancy and delivery. The one in the upper right-hand quadrant includes symptoms similar to reproductive tract infections, such as ulcer in genital area or in uterus and syphilis. The condition of general weakness also comes into this cluster without any apparent reasons. The two conditions, such as eclampsia and anaemia, were together in the lower left quadrant. The four conditions spread closely in the left-hand side across both upper and lower quadrant, include the problems faced after delivery. There were five conditions situated quite distantly from the others. Those included *sutika*, *ajat*, *ajalar kowari*, and gonorrhoea.

Table 2. Local names of female reproductive health problems, their symptoms, approximate biomedical equivalence, and average rank and salience in Chakaria, Bangladesh

Local name (Biomedical equivalence with similar symptoms)	Symptom	No. of respondents		Average severity rank			Average salience		
		M	F	C	M	F	C	M	F
1. Mashikeyr gulmal (Abnormal uterine bleeding, dysmenorrhoea)	Irregular cycle of menstruation, heavy bleeding, clotted blood, pain in lower abdomen, thigh, etc.	6	7	2.08	1.50	2.57	.65	.52	.77
2. Sada srub / sheta pradah / promeha/ luorrhoea (Candidiasis, trichomoniasis)	Excessive white discharge. Sometimes watery, sometimes like curd, foul smell, various colour - white, creamy, yellow, reddish. Sometimes with itching	5	8	1.62	2.20	1.25	.77	.60	.88
3. Sutika -jalani, lamani, foana (post-partum diarrhoea, calcium deficiency)	Diarrhoea with indigestion, abdominal discomfort. Happens after delivery. Burning in the whole body, especially hands and feet. Happens after delivery	4	7	1.64	1.75	1.57	.61	.82	.49
4. Puighar ber howa (Uterine prolapse, vaginal prolapse)	Holder of the placenta comes out, commonly after delivery	2	8	1.60	2.00	1.50	.56	.73	.51
5. Ajat (Gestational oedema)	Swelling/water in whole body during pregnancy	-	6	-	-	1.50	-	-	.57
6. Biola peera (Eclampsia, Cerebro-vascular accident).	Sudden death after delivery. Repeated convulsion before death	2	4	1.67	1.00	1.25	.29	.22	.33
7. Sharam jaigai ghaa/ jounangey ghaa (Syphilis, boil)	Ulcer in areas of shame (genitals)	1	4	1.40	2.00	1.25	.61	.17	.72
8. Gonorrhoea	Pus through urethra, burning during urination	3	1	1.50	1.33	2.00	.45	.56	.11
9. Mathha ghura (Vertigo, giddiness)	Giddiness while standing after prolonged sitting, white discharge	1	3	2.25	2.00	2.33	.38	.17	.45
10. Ajalar kowari (Pelvic Inflammatory diseases)	Severe pain in lower abdomen after delivery	-	4	-	-	2.75	-	-	.37
11. Syphilis	Ulcer in genitalia	2	2	1.75	1.50	2.00	.47	.54	.40
12. Tal patey bethha (Pelvic inflammatory diseases; ovulation pain)	Pain in lower abdomen	-	3	-	-	2.67	-	-	.51

*M refers to diseases mentioned by males only; F refers to diseases mentioned by females only; C refers to diseases mentioned by both males and females and to combined rank*

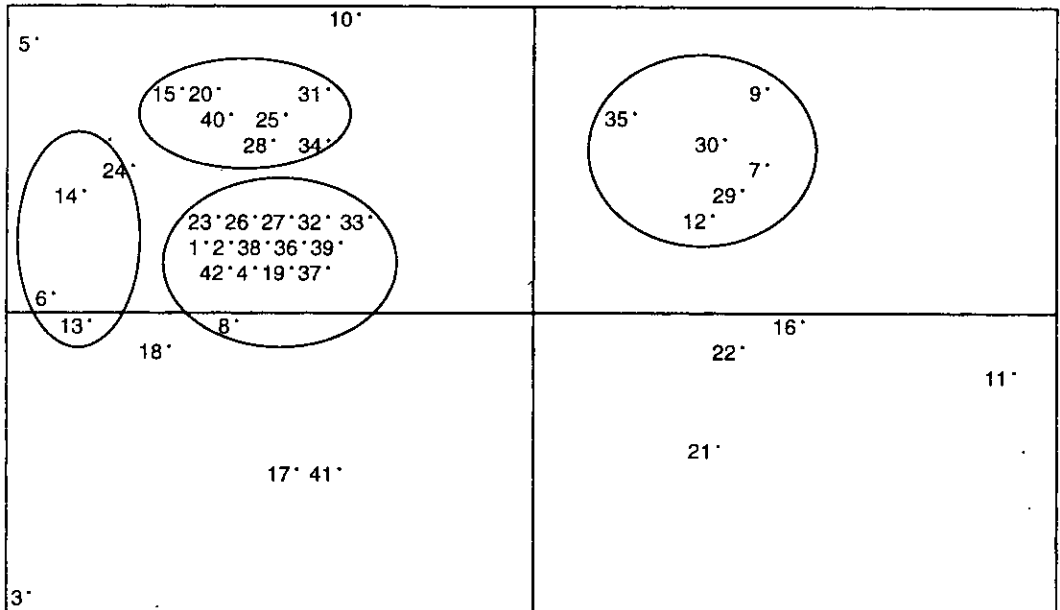
**Table 2. Continued**

Local name (Biomedical equivalence with similar symptoms)	Symptom	No. of respondents		Average severity rank			Average salience		
		M	F	C	M	F	C	M	F
13. Prashaber por pa phula (Anaemic heart failure)	Swollen feet/water in feet after delivery	1	2	1.33	1.00	1.50	.46	.28	.29
14. Swapnadosh (Vaginal secretion in sleep)	Involuntary emission of vaginal fluid while sleeping and often accompanied with dream	2	1	2.33	2.00	3.00	.61	.92	.00
15. Prashaber por beshi rakta jaowa (Post-partum haemorrhage)	Excessive vaginal bleeding after delivery	-	3	-	-	1.00	-	-	.28
16. Foaria ghaa (Cervical erosion, cervicitis, cervical cancer)	Ulcer in uterus/inside vagina	3	2	2.00	2.00	2.00	.41	.17	.89
17. Adina nasta howa/ garvapat (Abortion)	Pregnancy wastage	1	2	1.00	1.00	1.00	.61	.17	.84
18. Prashaber por jor (Puerperal pyrexia)	Fever after delivery	-	3	-	-	1.33	-	-	.21
19. Durbalata (Weakness)	Physical weakness interfering with day-to-day work	-	2	-	-	2.00	-	-	.64
20. Baaza (Infertility)	Unable to produce child	2	-	-	1.50	-	-	.25	-
21. Rataat mura (Muscle cramping)	Cramping in hand and leg	-	2	-	-	2.00	-	-	.66
22. Jarautey chulkani (Trichomoniasis)	Itching deep inside vagina	-	2	-	-	3.00	-	-	.22
23. Sahabashey okkham (Incapacity to perform sexual act)	Inability to perform coitus. Not interested.	2	2	2.50	2.00	3.00	.34	.00	.67
24. Voot and jeen	Abnormal behaviour	-	2	-	-	3.00	-	-	.07
25. Khalashey deri howa (Prolonged labour)	It takes long time to have a baby delivered	-	2	-	-	2.00	-	-	.31
26. Gardaney chinchinani (Cervical pain, hypertension, pre-menopausal syndrome)	Pain in shoulder and radiating towards head and back, especially among middle-aged women	-	-	1	-	2.00	-	-	.58
27. Khanarattu (Anorexia)	Can not eat sufficiently	-	1	-	-	3.00	-	-	.50
28. Baccha hower rasta chhirey jaowa (Birth canal injury)	Tearing of birth canal during delivery	-	1	-	-	3.00	-	-	.11

**Table 2. Continued**

Local name (Biomedical equivalence with similar symptoms)	Symptom	No. of respondents		Average severity rank			Average salience		
		M	F	C	M	F	C	M	F
29. Garber sarñai mathha bethha (Pre-eclamptic toxæmia, gestational hypertension)	Mild-to-severe headache during pregnancy	-	1	-	-	1.00	-	-	.25
30. Kamil bethha (Backache, pelvic inflammatory diseases)	Pain in back, waist	-	1	-	-	1.00	-	-	.70
31. Baccha hower samai beshi rakta jaowa (Intra-natal haemorrhage, antepartum haemorrhage, post-partum haemorrhage)	Excess vaginal bleeding during delivery	-	1	-	-	1.00	-	-	.63
32. Baccha pate thhaka abastai rakta jowa (Ante-partum haemorrhage)	Bleeding during pregnancy	-	1	-	-	1.00	-	-	.89
33. Dak kawari (Dyspepsia)	Unlocalized pain in abdomen	-	1	-	-	2.00	-	-	.20
34. Kharai (Urinary tract infection)	Burning sensation during urination/ passing concentrated urine	-	1	-	-	2.00	-	-	.10
35. Garvabostai bomi (Hyperemesis gravidarum)	Severe vomiting throughout pregnancy	-	1	-	-	2.00	-	-	.44
36. Shaista bhengey jai (Wasting)	Gradual weight loss	-	1	-	-	3.00	-	-	.71
37. Hatpa jalapura (Calcium deficiency)	Burning of palm and sole	-	1	-	-	2.00	-	-	.00
38. Dudh peera (Breast engorgement)	Tenderness of breasts after delivery due to accumulation of milk	1	-	-	1.00	-	-	.43	-
39. Prashaber por phul atkey jaowa (Retained placenta)	Placenta did not come out after delivery.	-	1	-	-	1.00	-	-	.42
40. Rakta sunnyata (Anaemia)	Giddiness, weakness, paleness	1	-	-	1.00	-	-	.17	-
41. Eclamsia	Convulsion after delivery leading to death	1	-	-	3.00	-	-	.50	-
42. Mathha bethha/ kamrani (Headache/migraine)	Migraine, headache	1	-	3.00	-	-	-	.25	-

Figure 2. Cognitive map of female reproductive and sexual health problems\*



List of diseases in major clusters: (Numbers correspond to the serial numbers in Table 2)

[1= Abnormal uterine bleeding, dysmenorrhoea; 2= Candidiasis, trichomoniasis; 4= Uterine prolapse, vaginal prolapse; 8=Gonorrhoea; 19= Weakness; 23= Incapacity to perform sexual act; 26= Cervical pain, hypertension, pre-menopausal syndrome; 27= Anaorexia; 32= Ante-partum hemorrhage; 33= Dyspepsia; 36= Wasting; 37= Calcium deficiency; ; 38= (Breast engorgement; 39= Retained placenta; 42= Headache/migraine]

[15= Post-partum haemorrhage; 20= Infertility; 25= Prolonged labour; 28= Birth canal injury; 31= Intra-natal haemorrhage, ante-partum haemorrhage, post-partum haemorrhage; 34= Urinary tract infection 40= Anaemia]

[6= Eclampsia, Cerebro-vascular accident; 13= Anaemic heart failure; 14= Vaginal secretion in sleep; 24= Abnormal behaviour]

[7= Syphilis, boil; 9= Vertigo, giddiness; 12= Pelvic inflammatory diseases; ovulation pain; 29= Pre-eclamptic toxemia, gestational hypertension; 30= Backache, pelvic inflammatory diseases; 35= Hyperemesis gravidarum]

[17= Abortion; 41= Eclampsia]

[11= Syphilis; 16= Cervical erosion, cervicitis, cervical cancer; 21= Muscle cramping; 22= Trichomoniasis/Itching deep inside vagina]

\*reproduced from SPSS/PC output

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## DISCUSSION

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It was evident from the results that the people of the study community were aware of various types of reproductive and sexual health problems, and most of the health problems had local names. These local names can be used effectively in carrying out quantitative and qualitative studies in future and in designing health education sessions. The advantage of local names in diarrhoea-related studies was found to be very useful (20), and a similar benefit can also be derived in the case of reproductive and sexual health problems. However, these names may have regional variation within the country and may not be universally accepted.

Discussions with the respondents revealed that the number of sexual and reproductive health problems was smaller among men than women. This was also supported by the fact that the number of problems mentioned for male was one-third of the female. Besides, a gender variation in terms of salience and severity of both male and female diseases implied that they view the associated problems differently. Since the prevention and management of sexual and reproductive health problems necessitate cooperation from both male and female partners, the reasons for this variation should be carefully studied. This can eventually be very helpful in developing effective interventions to address important issues, like male involvement and partner management. In this context, it should be mentioned that the male respondents were more shy than the female respondents in discussing the reproductive and sexual health problems. However, to initiate discussion and for successful interviewing, isolation of the respondents from other family members or individuals is essential. It was also felt that the interviewers with knowledge on reproductive and sexual health problems may be more effective in data gathering than those with inadequate knowledge. It was also felt that the higher the age of the interviewers, the easier the interviewing, especially among males.

The cognitive maps of the male and female diseases also showed the perceived linkage of the problems. If the reasoning of such clustering can be well-understood, interventions, especially the educational programmes, can make use of these cluster in designing and organizing effective curriculum. For example, the problems faced during pregnancy were clustered together; thus, it would be more sensible to include these in one module.

The methodology adopted in this study was at variant with what is done traditionally. For example, the number of respondents was not determined before. The decision to stop adding new respondents as soon as no new diseases were mentioned by the respondents was appropriate for more respondents were unlikely to add any new diseases to the already obtained list. The above argument also

holds good for cognitive mapping and for perceived severity. The problem, however, comes when one wants to make comparisons among sub-groups-- in our case, male versus female. No traditional statistical tests could be applied to assess the significance of the difference which may warrant different sampling procedures and a larger sample size. Thus, the results obtained in this study in relation to sex differentials in perception and severity can at best be taken as indicative and subject to further verification.

In conclusion, it should be emphasized that the factors associated with the reproductive and sexual health problems are rather complex. Very little is known in Bangladesh about their nature, magnitude, and consequences. Given the prevailing socioeconomic conditions and cultural context, concerted efforts of all stakeholders, from policy-makers to beneficiaries, are therefore needed to develop appropriate strategies and effective programme to alleviate the sexual and reproductive health problems-- a major challenge to face by the nation.



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*(continued from inside of the front cover)*

This system provides the capacity to analyze large data sets, and is complemented by over 300 personal computers and a few Local Area Network (LANs) throughout the Centre. New e-mail facilities have been established in the Centre. A new information technology (IT) strategy is in the process of implementation to replace the old mainframe.

**Dissemination and Information Services Centre:** The Dissemination and Information Services Centre (DISC) provides access to the scientific literature on diarrhoeal diseases, nutrition, population studies, health, environmental, and behavioural studies in general by means of Current Contents (Life Sciences and Clinical Medicine), MEDLINE, AIDS and POPLINE databases, books, bound journals, reprints of articles, documents, some four hundred current periodicals, etc. DISC publishes the quarterly *Journal of Diarrhoeal Diseases Research* (and bibliography on diarrhoeal diseases within the *Journal*), two quarterly newsletters *Glimpse* (in English) and *Shasthya Sanglap* (in Bangla), a bimonthly bilingual staff news bulletin--the ICDDR,B News, working papers, scientific reports, special publications, monographs, etc.

**Staff:** The Centre currently has over 200 researchers and medical staff from more than ten countries doing research and providing expertise in many disciplines related to the Centre's areas of research. One thousand two hundred personnel are working in the Centre.

### **What is the Centre's Plan for the Future?**

In the 37 years of its existence, ICDDR,B has evolved into a busy cosmopolitan research centre whose scientists have wide-ranging expertise. Future research will be directed toward finding cost-effective solutions to the health and population problems of the most disadvantaged people in the world. The Centre's Strategic Plan: "To The Year 2000" outlines work in the following key areas:

**Child Survival:** Diarrhoeal diseases are responsible for deaths of 3 million children every year.

Acute and persistent diarrhoea and dysentery will remain priority areas for research on strategies for prevention, including modifications in personal and domestic hygiene behaviours, provision of appropriate water supply to and sanitation for the households, and the development of effective vaccines. The Centre's scientists will contribute to the improvement of the case management of diarrhoea based on better understanding of basic mechanisms, and national and international responses to epidemics. Risk factors for low birth rate and potential interventions, acute respiratory infections, nutritional deficiency states (including micronutrients), and immunization-preventable infectious diseases will also be examined, particularly as they interact with diarrhoea.

**Population and Reproductive Health:** The Centre has a long history of conducting pioneering research in the areas of population and family planning. The Centre played a key role in raising the contraceptive use rate among women of reproductive age in Bangladesh to almost 45% through technical assistance and operations research. So much so that the 1994 Cairo Conference hailed Bangladesh as a family planning success story. Matlab is now the model for MCH-FP programmes throughout the world, and the Centre is poised to make important contributions to maternal health and safe motherhood. In addition to continuing work in these areas, the Centre has initiated community-based research on reproductive health and STD/RTI/HIV infections.

**Application and Policy:** The Centre will continue to play a major part in improving both supply of and demand for existing health technologies, and in replicating the successful interventions piloted in its projects through health systems research. The Centre will increase its communication, dissemination and training efforts to influence international and national health policies in the areas of its expertise. ICDDR,B recognizes, and has given a high priority to, the need to transform research findings into actions.

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