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IS NEEDED

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PREFACE

The International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) is an autonomous, international, philanthropic and non-profit centre for research, education and training as well as clinical service. The Centre is derived from the Cholera Research Laboratory (CRL). The activities of the institution are to undertake and promote study, research and dissemination of knowledge in diarrhoeal diseases and directly related subjects of nutrition and fertility with a view to develop improved methods of health care and for the prevention and control of diarrhoeal diseases and improvement of public health programmes with special relevance to developing countries. ICDDR,B issues two types of papers: scientific reports and working papers which demonstrate the type of research activity currently in progress at ICDDR,B. The views expressed in these papers are those of authors and do not necessarily represent views of International Centre for Diarrhoeal Disease Research, Bangladesh. They should not be quoted without the permission of the authors.

ABSTRACT

The Cholera Research Laboratory has assessed the knowledge and practice of condom use in two areas of rural Bangladesh; in one, condoms and instructions were distributed to all interested couples in August 1976, and the other received no special effort. Survey results confirmed field reports that many men initially identified condoms as balloons or children's toys. Coloured condoms provided to half the intensive distribution area did not result in higher rates of use. In the non-distribution area a minority of men (37%) were able to identify a family planning use for the condom. Although 2/3 of all men knew where to obtain condoms and the majority also knew the cost, only 16% could correctly describe the use of a condom. By contrast, in the intensive distribution area, 89% could identify the condom as a contraceptive, 93% knew where to obtain supplies, 86% knew it was free, and 45% could describe the correct use of condom. Therefore, the special effort improved knowledge about condoms. However, the condom practice rate increased only modestly from 1.2 to 3.8%. It seems that considerable educational and promotional work will be required to substantially increase condom usage in rural Bangladesh. Social marketing efforts may be helping to correct this problem.

INTRODUCTION

The condom has been a versatile contraceptive for centuries and is now being promoted and distributed by a variety of techniques in many countries, including South Asia (1). The Indian Nirodh condom sales increased considerably from 1968-1973 and this method was being used by an estimated 2.9 million Indian couples (2.7% of reproductive aged couples) in 1976 (1,2). In Pakistan the condom is reportedly the most popular method for promotion by field workers, yet there have been concerns that large quantities may be mis-used (3). However, details are lacking on the magnitude and specifics of such problems (3,4).

A pilot project to provide oral contraceptives and condoms to all eligible couples was undertaken in one thana of rural Bangladesh by the Cholera Research Laboratory (CRL) in October 1975. The purpose of this project was to determine the acceptability and effectiveness of a simple house-to-house delivery system of contraceptives. Contraceptives were distributed in 143 villages, half the 260, 000 population of the Matlab thana field surveillance area (FSA). The other half - the non-distribution area received family planning services from the national programme.

EARLY EXPERIENCE WITH CONDOMS

This study arose from the need to examine some of the factors related to the low level of condom use and the lethargic response to our promotion of the condom. Our field workers had been reporting that many men did not know the condom could be used for family planning and more importantly they seemed

reluctant to consider it as a method they might use because of its association as a child's toy. We found plain (non-coloured) condoms, the same as provided through the national programme being sold through village shops and local bazaars. Children reportedly were the principal and sometimes sole purchasers. Condoms were regularly sold during the past 2-3 years. Furthermore, our female village level workers (dais) who carried oral contraceptives and condoms with them daily during home visits sometimes complained that children would pester them to obtain condoms. When our male field workers were visiting households to provide condoms and instructions, children were often urging their parents to take the supplies. In turn, parents who received condoms (usually 1 dozen) would sometimes placate the child with a few condoms and place the remainder in safe keeping.

The extent to which children were familiar with the condom as a toy was not so important to us as the extent to which adults were unfamiliar with the condom as a contraceptive. That many adults did not perceive the condom as a contraceptive seemed consistent with our observation of a very low baseline level of condoms practice despite moderate availability through local markets and government workers. Full availability through the CRL dais (who carried condoms through the village daily) resulted in only a modest increase in use. Admittedly, the main emphasis was on oral contraceptives during the early months of the programme, as this was considered a more effective method, and the vigorous introduction of only one method at a time seemed appropriate for this non-contracepting population. However, as pill acceptors began dropping out, many were using no method, and a special intensive promotion of condoms seemed appropriate nine months after the start of the programme.

METHODS

The special distribution of condoms included new educational materials with explicit pictorial instructions (Appendix 1). These were developed at the suggestion of Bengali staff with the help of villagers. The instructions could then be given to the husband or his wife if he was not present during the interview. The community may also become more sensitized to the intended use of condoms. Even though the distribution was conducted during the monsoon when many men are unemployed and are more likely to be at home, only 25 percent were present during the visit. Therefore, the instructions and one dozen condoms were usually provided to women. Coloured condoms were given in half of the distribution area and the other half received plain condoms.

The proportion of eligible couples using condoms and other methods of contraception was assessed every three months by means of a prevalence survey. Twenty percent of the villages in the condom distribution and the non-distribution area were included.

The impact of our efforts on the knowledge of condoms was assessed by a survey in November 1976. We selected 510 baris* (the sampling units) in the contraceptive distribution area and a similar number in the non-distribution area. This number was chosen because we wished to interview at least 250 male respondents in each area, and our pretesting interviews suggested only 50 percent of baris would have an eligible male at home.

* a group of patrilineally related households containing on average 5-6 families with 30-35 members.

Following a random start, a systematic sample of 10 percent of villages in each area was identified and equal numbers of baris from each village within an area were sequentially identified from the CRL census. This procedure resulted in the selection of a total of 32 villages with an average cluster size of 32 baris each. If the designated number of baris could not be obtained in one village, the next adjacent village was then included to obtain the required cluster size.

Eligible males were defined as husbands of non-menopausal women aged 15-44 years. Only one respondent was selected from each bari since pre-testing indicated subsequent interviews in the same bari were invariably contaminated by the first. If the first household did not contain an eligible man the interviewers proceeded sequentially to the next house according to the CRL census numbers until he found a respondent or exhausted all the houses in that bari.

The interviewer showed several condoms (one of which was in clear view through the transparent wrapping) to men and asked six questions about the identity and use of the condom as follows: 1. "What is this used for?"; 2. (Asked of respondents indicating a non-contraceptive use on the first question) "Can it be used for anything else?"; 3. "From whom would you obtain this product?"; 4. "At what distance from your house could you obtain it?"; 5. "How much would it cost?"; 6. "Can you explain how this should be used as a family planning method?". An understanding of how the condom was to be applied, used and removed was given credit as being "correct". Less than a complete understanding was considered "partially correct" if the man understood the condom should cover the penis during intercourse. For practical purposes the interviewer's distinction between these latter two categories was fairly arbitrary.

RESULTS

Based on the quarterly prevalence surveys, condom was very low before the contraceptive programme started in Matlab thana. The prevalence rate of use increased from 0.02 percent to 1.2 percent in the contraceptive distribution area over 9 months and remained at 0.2 percent in the non-distribution area. With intensive educational and distribution efforts, 35 percent of couples received condoms but the active user rate increased only to 3.8 percent. The villages receiving coloured condoms did not report a higher rate of use (Table 1). This finding was consistent with field worker impressions that coloured condoms as such produced little reaction, positive or negative. Condom use remained much lower than pills or injectables where these alternative methods were offered in competition. To compare the condom distribution with an earlier distribution of oral contraceptives, 69 percent of all "eligible" couples initially received pills, and 17 percent were using this method at three months following the distribution. The special condom distribution raised the overall contraceptive use rate from 14 to 15 percent whereas the addition of condoms and injectables in selected villages raised the rate from 14 to 20 percent. The vast majority of new users in these villages chose the injectable. The reluctance to use condoms was thereby established, thus prompting the special survey.

When initially asked to identify a condom, almost four times as many in the contraceptive area identified it initially as a method of family planning, 46.5 percent, compared to 12.8 percent in the non-distribution area (Table 2). However, more than half in the contraceptive area and 82 percent in the non-distribution area identified it first as a balloon, toy, or could not identify it.

TABLE 1
 CONTRACEPTIVE USE RATE FOR MARRIED FECUND WOMEN
 AGED 15-44 - COLOURED AND PLAIN CONDOM
 AREAS - PREVALENCE SURVEY, MATLAB, NOVEMBER 1976

	Coloured Condoms Distributed		Plain Condoms Distributed		Combined Areas	
Women interviewed	2507		1757		4264	
<u>Method Currently Used</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
Oral Contraceptives	280	11.2	158	9.0	438	10.3
Condoms	88	3.5	73	4.2	161	3.8
Other	20	0.8	17	1.0	37	0.9
Total	388	15.5	248	14.1	636	14.9

TABLE 2
 INITIAL IDENTIFICATION OF USE OF CONDOM, MATLAB, NOVEMBER 1976

	Contraceptive Distribution Area		Non-Contraceptive Area	
	Number	(%)	Number	(%)
Contraceptive	139	46.5	37	12.8
Balloon, toy or other	142	47.5	158	54.9
Contraceptive and balloon, toy or other	8	2.6	15	5.2
Do not know	10	3.3	78	27.1
Total	299	99.9	288	100.0

A degree of modesty was detected on the pretest, possibly resulting in some reluctance to specify the contraceptive purpose of the condom. Therefore, the second question was asked to those who did not initially identify a contraceptive function. With this additional question, a total of 88.6 percent and 36.8 percent were able to identify a family planning use for the condom in the contraceptive and non-distribution areas respectively (Table 3).

TABLE 3

ABILITY TO IDENTIFY THE CONDOM AS A CONTRACEPTIVE ON EITHER INITIAL OR SECONDARY RESPONSE* MATLAB, NOVEMBER 1976

Use Identified	Contraceptive Distribution Area		Non-Distribution Area	
	Number	(%)	Number	(%)
Contraceptive	265	88.6	106	36.8
Non-contraceptive only or not known	34	11.4	182	63.2
Total	299	100.0	288	100.0

* Men initially identifying the condom as a balloon, toy or "other" (Table 2) were then asked if they knew of any additional use for the product. Those indicating a contraceptive use were added to those in Table 2 to determine the maximum number aware of a family planning use for the condom.

The large majority in the contraceptive area correctly named that CRL female village worker as a source of condoms in their village and some named additional sources (Table 4). Only 6.7 percent did not know where to obtain a condom in the contraceptive area in contrast to 32.6 percent in the non-distribution area. The majority in the non-distribution area identified a market or shop as the place to obtain condoms, although there is no official commercial marketing activity in Matlab thana.

Availability was assessed by asking at what distance the men could obtain a condom. Seventy-five percent in the distribution area correctly named their own village as the nearest point to obtain condoms (Table 5). Only 1 percent in the non-distribution area named his own village; however fifty percent knew a source within two miles of their homes.

TABLE 4
 REPORTED SOURCES OF CONDOMS*
 MATLAB 1976

Source	Contraceptive Distribution Area		Non-Distribution Area	
	Number	(%)	Number	(%)
CRL Field Worker	257	86.0	2	0.7
Market or Shop	47	15.7	156	54.2
Government Worker	20	6.7	49	17.0
Fertility Res.Clinic (Matlab)	0	0.0	4	1.4
None Known	20	6.7	94	32.6
Total	344	115.1*	305	105.9**

* Men were asked "From whom would you obtain this product?"

** Percentages total to more than 100 because more than one source could be named by each respondent.

TABLE 5
 DISTANCE FROM HOUSEHOLD WHERE CONDOMS COULD BE OBTAINED
 MATLAB, NOVEMBER 1976

Location of Source	Contraceptive Distribution Area		Non-Distribution Area	
	Number	(%)	Number	(%)
Within Own Village	224	74.9	3	1.0
Outside Village --				
< 1 Mile	55	18.4	93	32.3
1-2 Miles	0	0.0	51	17.7
3-4 "	0	0.0	37	12.8
5+ "	0	0.0	7	2.4
None Known	20	6.7	97	33.7
Total	299	100.0	288	99.9

The cost of a condom was indicated as less than 20 paisa (1.3 cents U.S.) by over half those in the non-distribution area and most of the remainder did not know the cost (Table 6). Over 90% in the contraceptive area indicated the condom was either free (as provided by CRL) or less than 10 paisa.

TABLE 6
REPORTED COST OF ONE CONDOM, MATLAB, NOVEMBER 1976

C o s t	Contraceptive Distribution Area		Non-Distribution Area	
	Number	(%)	Number	(%)
Free	256	85.6	37	12.8
1 -10 Paisa*	15	5.0	76	26.4
11-20 "	0	0.0	44	15.3
21-30 "	0	0.0	3	1.0
31-40 "	0	0.0	2	0.7
41+ "	0	0.0	1	0.3
Not Known	28	9.4	125	43.4
Total	299	100.0	288	99.9

* 15 Paisa = \$ 0.01 U.S.

One third of men in the contraceptive area and two thirds in the non-distribution area could not explain how the condom could be used as a family planning method (Table 7). This question was inadvertently omitted during some of the first interviews; however the overall results would not be substantially influenced. Reluctance to describe the correct use of the condom might be greater in the non-distribution area, although the responses are fairly consistent with the initial low number correctly identifying the condom as a family planning method (Table 2). More than four times as many in the contraceptive area could correctly describe the use of a condom.

TABLE 7

ABILITY TO DESCRIBE THE USE OF THE CONDOM AS A
CONTRACEPTIVE, MATLAB, NOVEMBER 1976

R e s p o n s e	Contraceptive Distribution Area		Non-Distribution Area	
	Number	(%)	Number	(%)
Correct	133	44.5	28	9.7
Partially Correct	35	11.7	18	6.3
Incorrect	1	0.3	1	0.3
Could not Respond	99	33.1	197	68.4
Question Not Asked	31	10.4	44	15.3
Total	299	100.0	288	100.0

The survey has confirmed that men not in the special distribution area generally could not identify the condom as a contraceptive. The situation was improved in the contraceptive distribution area, although even here almost half initially identified it as a toy. Consistent with these findings was the widespread inability to correctly describe the use of condoms in the non-distribution area, despite the fact that the condom had been generally available for several years. Most of these men know who provided condoms, where to find the product, and how much the condom cost. The widespread unofficial marketing of condoms in the non-distribution area was confirmed, the price generally being below the 20-30 paisa price of commercial balloons.

Records show that condoms were regularly received by the local government programme from October 1971 to 1977 (6). Previous records were reportedly lost in the War of Liberation. From 6,000 to 11,000 dozen condoms were received

annually from 1973 to 1976. Based on the above supply date, between 2.1 and 3.4 percent of the estimated 24,300 eligible Matlab thana couples should be active users from 1971-1976 (assuming 12 condoms per month per couple). However our baseline survey in November 1975 found 0.2 percent reporting active condom use. This information is consistent with our findings that the condom is not readily used by men in this area.

DISCUSSION

One might ask if our findings are likely to be unique only to this one area of Bangladesh. National reports for the quarter ending December 31, 1975 indicate sufficient condoms were being distributed to supply 2.7 percent of Bangladesh's 16 million fertile couples (7). However, the Bangladesh Fertility Survey (BFS) conducted in late 1975 and early 1976 found 0.9 percent of couples reporting active condom use (8). By contrast, pill supplies would protect 2.8 percent of couples in the same period and the BFS reported 3.4 percent active pill users. The difference between condoms supplied and used might be explained if a large proportion of condoms were being misused. However, other explanations may also be relevant, including the possibility that condom use may be selectively under-reported.

This latter possibility may contribute to the large difference between national programme commodity distribution and the CRL reported baseline level of condom use. The BFS questions on contraceptive practice probed for responses more than ours, and this may have increased reporting. Underreporting of contraceptive practice has been noted in other family planning surveys in Bangladesh (9). However, at least for pills, we found over-reporting to be a problem once we started our distribution system. To summarize, the accuracy

of reporting condom use would be very difficult to confirm short of assessing the pregnancy experience of condom acceptors. This latter task may be undertaken for the Matlab experience.

Matlab is not an unusually conservative Muslim area and we are not aware of other factors that might inhibit the use of condoms. However, one should exercise caution in extending the assessment of any experience in this limited area to the larger population of Bangladesh. Nonetheless, BFS national survey data also indicate a disturbingly low level of condom use.

Progress has been slow not only in attaining higher use rates with the condom, but also in achieving recognition of the condom as a method of family planning. The previous general availability of the condom without adequate information about its intended use probably contributed to this difficulty. We feel some success has been made by our direct and explicit educational efforts about condom use. However, a vigorous ongoing effort will likely be needed to sustain increases in usage. An energetic approach through social marketing, mass media, and personal education may help in meeting this need.

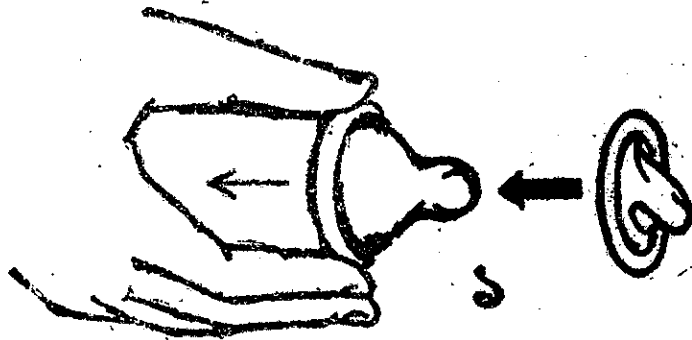
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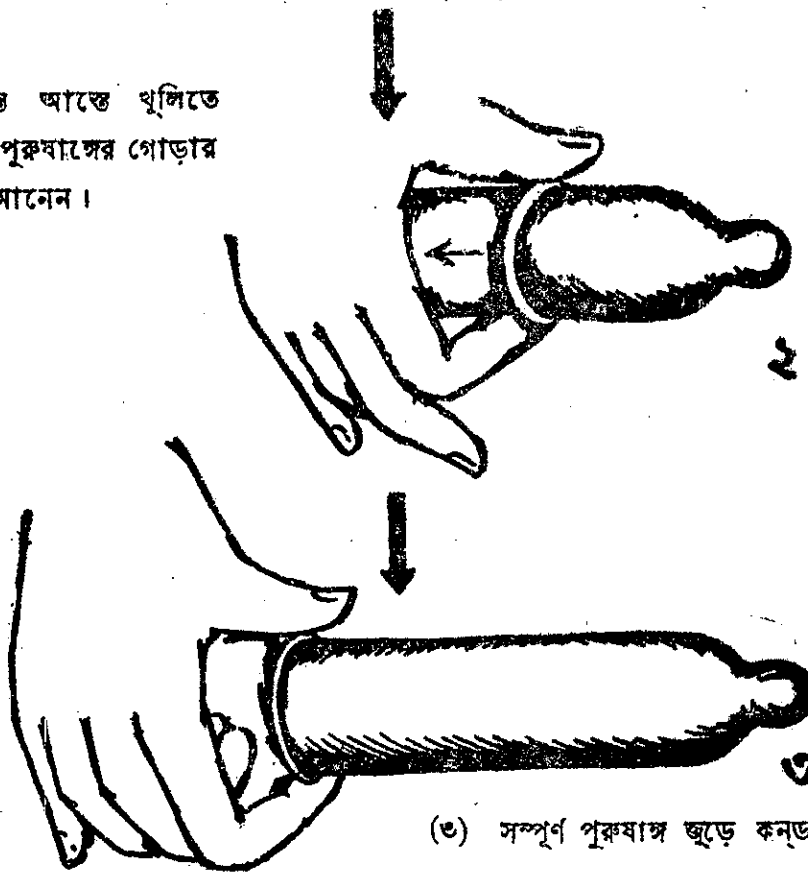
কলেৰা গবেষণাগাৰ, মতলব

কন্ডম ব্যৱহাৰৰ নিয়ম
(কেবলমাত্ৰ বিবাহিতাদেৱ জন্ম)

(১) কন্ডমটি পুৰুষাঙ্গৰ আগায় এইভাবে
পৰাইতে শুৰু কৰিবেন।



(২) কন্ডমটি আন্তে আন্তে খুলিতে
থাকেন এবং পুৰুষাঙ্গৰ গোড়ার
দিকে টানিয়া আনেন।



(৩) সম্পূৰ্ণ পুৰুষাঙ্গ জুড়ে কন্ডমটি লাগান।

বীৰ্য্য বাহিৰ হইয়া পুৰুষাঙ্গ শিথিল হইবার পূৰ্বে কন্ডমটি
হাত দিয়া চাপিয়া ধৰিয়া এমনভাবে বাহিৰ কৰিবেন
যাহাতে বীৰ্য্য কোন নকমেই কন্ডমের বাহিৰে না যায়।



একটি কন্ডম একবার ব্যৱহাৰ কৰিবেন।

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- A. CRL Annual Report 1976.
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