#### Emergency Contraceptive and Condom: Users and attitude study



# A DISSERTATION SUBMITTED TO THE DEPARTMENT OF PHARMACY,

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#### **Declaration by the Thesis candidate**

I, M Tareq Mahmud, hereby declare that the dissertation entitled "*Emergency Contraceptives and Condom: Users and attitude study*", submitted by me to the Department of Pharmacy, East West University, in partial fulfillment of the requirements for the award of the degree of masters of Pharmacy (M.PHARM) is a complete record of original research work carried out by me during the period 2015-2016 under the supervision and guidance of Dr. Sufia Islam, Professor, Department of Pharmacy, East West University and it has not formed the basis for the award of any other Degree/Diploma/Fellowship or other similar title to any candidate of any University.

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#### **Abstract:**

Throughout the world, unplanned pregnancy is a considerable social and public health issue. The majority of cases are unwanted pregnancies and many of these cases result in abortion. Pregnancies in girls between 14 and 17 years rose from 4‰ in 1990 to almost 12‰ in 2006 (Trussell, et.al. 2016). This may have been due to two factors. Firstly, that contraception is either not used or is used incorrectly in many cases. Secondly, that penetrative sexual relations are being initiated at a younger age; and the younger age leads to a decrease in risk perception (Milsom et al.1982). The rate of abortion or voluntary pregnancy termination (VPT) represents an estimate of the number of unwanted pregnancies

Though oral contraceptive pills are most widely used contraception method for a long time in our country. As it is well accepted that oral contraceptive pills has a long list of side effects and taking a pill every day is troublesome for women, other contraception methods are getting popular day by day.

Thus the objective of this study is to find the real cause why women are using emergency pills, reason behind using condoms by the users and attitude towards ECP and condoms of its users. Target respondents were Married Women in the Reproductive Age (MWRAs) (15-49 years) for emergency contraceptives and husbands of MWRAs for condom usage of Dhaka, Chittagong, Rajshahi, Khulna, and Comilla. We have found that the reasons why emergency contraceptives getting popularity because it is easy to use, hustle free, can prevent unwanted pregnancy taking even after couple of days of having sex. Condom users generally use condoms because their partner do not want to take pills. And the second reason was they use condoms because it can prevent sexually transmitted diseases.

Though the concept of emergency contraceptive is relatively new. Consumers are getting used to with ECP comparatively faster. Whether using emergency contraceptive pill or condom almost all of the populations were aware of family planning method.

# Chapter 1:

# Introduction

#### 1. Introduction:

In the second half of the 20th century, the emergence of contraception and its massive use in the developed world represented an effective measure for birth control and the avoidance of unwanted pregnancies. Lately, scientific advances have led to other types of drugs entering the market, known as emergency contraception (EC) or the 'post-coital pill'. EC use can be defined as taking a contraceptive drug (also known as the 'morning after pill') up to 72 hours after unprotected coitus with the aim of preventing an unwanted pregnancy. Its mechanism of action is to impede ovulation or fertilization, but once the fertilized egg is implanted the pill will not have any effect (Melissa, 2015).

The conclusions of clinical trials on the efficacy of these drugs support the use of Progestogen only (total dose of 1.5 mg of levonorgestrel) as the method of emergency contraception of choice due to greater effectiveness and lower incidence of nausea and vomiting <sup>(6)</sup>. The introduction of these drugs to the market considerably raised expectations regarding prevention and reduction of the number of VPT and it has even been argued that its use could prevent up to 95% of unwanted pregnancies (Nearns, J. 2009).

In 2003, 317,670 morning after pills were dispensed, which corresponds to 3% of women of childbearing age, indicating a sharp increase in consumption (Melissa, 2015). From September 2009, the so-called 'morning-after pill' could be acquired without a medical prescription in Spanish pharmacies. This measure aims to facilitate access to this pill for all women who require it, at the appropriate time to ensure its efficacy, irrespective of their place of residence and the regional laws in effect.

This deregulation of the pill and improvements in access to it, help to overcome certain obstacles for women such as the shame they may feel in consulting a health professional, as well as facilitating its anonymous purchase at pharmacies.

From another point of view, such a high level of use could be interpreted as a failure, as access to contraception has not prevented the increase in abortions, nor has the availability of condoms reduced demands for the morning-after pill. Rather, it seems that these are factors which, taken together, may encourage people to enter into risky situations or remain in them.

Thus, the improvements in EC accessibility have led to the formulation of three more pragmatic concerns: 1) Whether easy access to the EC pill increases early sexual activity, 2) Whether women using this method repeatedly tend to abandon their habitual contraceptives; and 3) Whether these factors expose women and their partners to a greater risk of sexually transmitted diseases.

#### 1.1. Emergency Contraception

Emergency contraception is the use of an emergency contraceptive regimen in the first few days following unprotected intercourse, in order to prevent pregnancy.

**Types:** Three main types of EC are available, namely:

- ❖ Combined oral contraceptives (COCs) at a higher dose than that used for continuous contraception
- ❖ Progestogen-only pills (POPs) at a higher dose than that used for continuous contraception
- \* Copper intrauterine devices (IUDs).

The first two regimens are referred to as emergency contraceptive pills (ECPs). This approach requires two equivalent doses of ECPs, 12 hours apart, preferably within 72 hours of unprotected intercourse. Each dose of COCs should contain at least 100 µg of EE and at least 300 µg of levonorgestrel (LNG). Each dose of POPs should contain 750 µg of LNG. There are pills specially packaged for EC; however, levonorgestrel pills commonly available for continuous contraception may also be used for this purpose. A copper IUD inserted within five days of unprotected intercourse is another option for emergency contraception. In instances where an adolescent is at low risk for STIs and desires a long-acting contraceptive method, this may be an appropriate emergency contraceptive choice. In most situations, because of the eligibility requirements for IUDs (see IUD section below), ECPs present a more realistic option (WHO, 2014).

#### 1.2. Effectiveness:

The effectiveness of ECPs is estimated by comparing the number of expected pregnancies that would occur if no method were used with the actual number of pregnancies that occur after ECP use. It is estimated that 8 out of 100 women would get pregnant if each had a single act of unprotected intercourse in the second or third week of the menstrual cycle. Recent studies have shown that when correctly used COCs prevent 75% and POPs 85% of the expected pregnancies

Importantly, ECP effectiveness is substantially influenced by the time elapsed after intercourse prior to using the method; ECPs are more effective the earlier they are taken after unprotected intercourse. Copper-bearing IUDs are the most effective form of emergency contraception. When inserted within five days of unprotected intercourse, 99% of expected pregnancies are prevented (Glasier, 1997; Trussell & Ellertson, 1995). However, the risk of STIs and the desire to avoid using the IUD in the long term are two reasons that limit the use of copper-bearing IUDs in most adolescents (WHO, 2014).

#### 1.3. Mechanism:

The precise postcoital mechanism of action of ECPs and copper-bearing IUDs is not known. In the case of ECPs, the mechanism may also vary according to the point in the menstrual cycle at which they are used. The main effect is inhibition or delay of ovulation (Swahn et al., 1996) but it is also possible that ECPs and the IUD may have effects on the genital tract that affect the survival or motility of sperm and the transport function of fallopian tubes, or prevent fertilization. Some studies have also shown that when ovulation occurs, ECP use results in an insufficient corpus luteum. In addition, the type of endometrium that develops after ECP use might not be appropriate for normal implantation. Current evidence points to a pre-implantation effect of ECPs. Once a fertilized egg is implanted, ECPs are not; and because

ECPs do not interrupt pregnancy; they are not a form of abortion.

#### 1.4. Return of fertility:

The contraceptive effect of ECPs is transitory, and return of fertility is immediate. The need for a regular method of contraception therefore needs to be discussed. Return of fertility after IUD use is also immediate, and an IUD should only be chosen if the prospective user is an appropriate candidate and wants the IUD for continuous contraception.

#### 1.5. Side-effects and management:

Nausea and vomiting are frequent and sometimes severe side-effects of ECP use, especially with the COC regimen. About 19% of COC and 6% of POP users vomit during use. Dizziness, breast tenderness, headaches and fatigue may also be experienced. In addition, bleeding irregularity may occur in the cycle during which ECPs are used. If treatment is taken before ovulation, the onset of bleeding may be 3–7 days earlier than expected; if taken after ovulation, bleeding may be at the expected time or delayed. Where circumstances permit, anti-emetic drugs could be used prophylactically, but once nausea and vomiting has begun, anti-emetics are ineffective. As with adults, when vomiting occurs within two hours of ECP administration, a second dose of ECPs and the prophylactic use of anti-emetics is recommended. If vomiting continues, a repeat dose of ECPs can be given vaginally (WHO, 2014).

#### **1.6. Condom:**

A condom is a sheath-shaped barrier device that may be used during sexual intercourse to reduce the probability of pregnancy and decrease the risk of sexually transmitted infections (STIs) such as HIV/AIDS. It is rolled onto an erect penis before intercourse and blocks ejaculated semen from entering the body of a sexual partner. Condoms are also used during fellatio and for collection of semen for use in infertility treatment. In the modern age, condoms are most often made from latex, but some are made from other materials such

as polyurethane, polyisoprene, or lamb intestine. A female condom is also available, often made of nitrile rubber. (11)

As a method of birth control, male condoms have the advantages of being inexpensive, easy to use, having few side effects, and offering protection against sexually transmitted infections. With proper use—and use at every act of intercourse—women whose partners use male condoms experience a 2% per-year pregnancy rate. With typical use the rate of pregnancy is 18% per-year. (12) Condoms have been used for at least 400 years. Since the 19th century, they have been one of the most popular methods of contraception in the world. While widely accepted in modern times, condoms have generated some controversy, primarily over what role they should play in sex education classes.

C

## Chapter 2:

# Literature review

#### 2. Literature Review:

# 2.1. Strategies to improve adherence and acceptability of hormonal methods of contraception.

#### **BACKGROUND:**

Worldwide, hormonal contraceptives are among the most popular reversible contraceptives. Despite their high theoretical effectiveness, typical use results in much lower effectiveness. In large part, this disparity reflects difficulties in adherence to the contraceptive regimen and low rates for long-term continuation.

#### **OBJECTIVES:**

The intent was to determine the effectiveness of ancillary counseling techniques to improve adherence to, and continuation of, hormonal methods of contraception.

#### **SEARCH METHODS:**

Through August 2013, we searched computerized databases for randomized controlled trials (RCTs) comparing client-provider interventions with standard family planning counseling. Sources included CENTRAL, MEDLINE, EMBASE, POPLINE, ClinicalTrials.gov and ICTRP. Earlier searches also included LILACS, PsycINFO, Dissertation Abstracts, African Index Medicus, and IMEMR.

#### **SELECTION CRITERIA:**

We included RCTs of an intensive counseling technique or other client-provider intervention compared to routine family planning counseling. Interventions included group motivation; structured, peer, or multi-component counseling; and intensive reminders of appointments or next dosing. Outcome measures were discontinuation, reasons for discontinuation, number of missed pills or on-time injections, and pregnancy.

#### **DATA COLLECTION AND ANALYSIS:**

One author evaluated the titles and abstracts from the searches to determine eligibility. Two authors extracted data from the included studies. We calculated the Mantel-Haenszel odds ratio (OR) for dichotomous outcomes. For continuous variables, the mean difference (MD) was computed; RevMan uses the inverse variance approach. For all analyses, 95%

confidence intervals (CI) were also computed. Since the studies identified differed in both interventions and outcome measures, we did not conduct a meta-analysis.

#### **RESULTS:**

Nine RCTs met our inclusion criteria. Five involved direct counseling; of those, two also provided multiple contacts by telephone. Four other trials provided intensive reminders, two of which also provided health education information. Three trials showed some benefit of the experimental intervention. In a counseling intervention, women who received repeated structured information about the injectable depot medroxyprogesterone acetate (DMPA) were less likely to discontinue the method by 12 months (OR 0.27; 95% CI 0.16 to 0.44) than women who had routine counseling. The intervention group was also less likely to discontinue due to menstrual disturbances (OR 0.20; 95% CI 0.11 to 0.37). Another trial showed a group with special counseling plus phone calls was more likely than the specialcounseling group to report consistent use of oral contraceptives (OC) at 3 months (OR 1.41; 95% CI 1.06 to 1.87), though not at 12 months. The group with only special counseling did not differ significantly from those with standard care for any outcome. The third trial compared daily text-message reminders about OCs plus health information versus standard care. Women in the text-message group were more likely than the standard-care group to continue OC use by six months (OR 1.54; 95% CI 1.14 to 2.10). The text-message group was also more likely to avoid an interruption in OC use longer than seven days (OR 1.53; 95% CI 1.13 to 2.07).

#### **CONCLUSIONS:**

Only three trials showed some benefit of strategies to improve adherence and continuation. However, several had small sample sizes and six had high losses to follow up. The overall quality of evidence was considered moderate. The intervention type and intensity varied greatly across the studies. A combination of intensive counseling and multiple contacts and reminders may be needed to improve adherence and acceptability of contraceptive use. High-quality RCTs with adequate power and well-designed interventions could help identify ways to improve adherence to, and continuation of, hormonal contraceptive methods (Halpern V et al., 2013).

### 2.2. Family planning use among urban poor women from six cities of Uttar Pradesh, India.

Family planning has widespread positive impacts for population health and well-being; contraceptive use not only decreases unintended pregnancies and reduces infant and maternal mortality and morbidity, but it is critical to the achievement of Millennium Development Goals. This study uses baseline, representative data from six cities in Uttar Pradesh, India to examine family planning use among the urban poor. Data were collected from about 3,000 currently married women in each city (Allahabad, Agra, Varanasi, Aligarh, Gorakhpur, and Moradabad) for a total sample size of 17,643 women. Participating women were asked about their fertility desires, family planning use, and reproductive health. The survey over-sampled slum residents; this permits in-depth analyses of the urban poor and their family planning use behaviors. Bivariate and multivariate analyses are used to examine the role of wealth and education on family planning use and unmet need for family planning. Across all of the cities, about 50% of women report modern method use. Women in slum areas generally report less family planning use and among those women who use, slum women are more likely to be sterilized than to use other methods, including condoms and hormonal methods. Across all cities, there is a higher unmet need for family planning to limit childbearing than for spacing births. Poorer women are more likely to have an unmet need than richer women in both the slum and non-slum samples; this effect is attenuated when education is included in the analysis. Programs seeking to target the urban poor in Uttar Pradesh and elsewhere in India may be better served to identify the less educated women and target these women with appropriate family planning messages and methods that meet their current and future fertility desire needs (Speizer et al., 2012).

### Chapter 3:

# Objective of the study

#### 3. Study Objectives

#### The broad objectives of the study-

- A. To understand the current usage, attitude and practice with regard to the use of emergency contraceptive and condom
- B. Users perception about different contraception method available in this segment and the profile of users, including media habits
- C. To identify the factors that determine the choice of contraception methods

### Chapter 4:

# Study technique and sample design

#### 4.1. Study technique

Quantitative technique has been used to conduct the study as a standard method

#### 4.2. Data Collection Technique

Face-to-Face interview with semi-structured questionnaire

#### 4.3. Survey Implementation

#### 4.3.1. Sample design

Only urban areas covered. Distribution of sample size by region was as follows:

	User of CONDOM	User of ECP	TOTAL
Dhaka	100	31	131
Chittagong	100	22	122
Rajshahi	100	8	108
Khulna	100	22	122
Comilla	100	17	117
Sylhet	100	-	100
TOTAL	600	100	700

#### **4.3.2.** Target Respondents:

Married Women in the Reproductive Age (MWRAs) (15-49 years) for oral contraceptives and husbands of MWRAs for condom usage.

#### **4.3.3. SEC (Socio Economic Condition)**

**SEC A:** Upper middle class. Monthly income about BDT 50,000.

**SEC B:** Middle class. Monthly income less than BDT 30,000.

Users of any commercially sold oral contraceptive pill (OCP), emergency contraceptive pill (ECP) and users of condoms as a family-planning method in Dhaka, Chittagong, Rajshahi, Khulna and Comilla. Currently non-users of OCP in Sylhet.

## Chapter 5:

# Questionnaires

#### 5. Questionnaires:

- Awareness of family planning method
- Contraception method awareness of ECP
- Ever-used method-by Center
- Current method-by Center
- Reasons for using current method
- Features liked about current method
- Reasons for disliking
- Who influences to use current method
- Frequency of purchasing emergency contraceptive
- Quantity of emergency contraceptive purchased at a time
- Place of purchase
- Who purchase emergency contraceptive for User
- Education of Users-by method
- TV Viewership
- Brand Awareness of ECP Users
- Reasons for using last used method
- Influencer
- Incidence of having side effects of last used brand
- Incidence of having side effects of last used brand
- Incidence of having side effects of last used brand
- Frequency of using condom during sex
- Notice ability of advantages of using condom besides birth control
- Advantage of using condom besides birth control
- Frequency of purchasing condom
- Quantity of condom purchased at a time
- Place of purchase of condom
- Who buy condom for respondents

# Chapter 6:

# Result

#### 6. Result

#### 6.1. Awareness of Family Planning Method among ECP users

All respondents are aware of oral contraceptives and condoms as family planning method.

Table 1: Awareness of Family Planning Method among ECP users

	Dhaka	Chittagong	Rajshahi	Khulna	Comilla	All
Contraceptive pill	100.0	100.0	100.0	100.0	100.0	100.0
Condom	100.0	100.0	100.0	100.0	100.0	100.0
Injection	96.8	86.4	87.5	90.9	100.0	93.0
Natural through Abstinence	93.5	59.1	37.5	90.9	88.2	80.0
Tubectomy (infertility in women)	100.0	90.9	100.0	63.6	94.1	89.0
Norplant	93.5	68.2	100.0	90.9	94.1	88.0
I.U.D.	96.8	63.6	75.0	81.8	100	85.0
Vasectomy (infertility in men)	100.0	59.1	75.0	54.5	58.8	72.0
Withdraw	90.3	68.2	25.0	45.5	29.4	60.0
Don't know/cannot say	3.2	0.0	0.0	0.0	0.0	1.0
Base-User of ECP	31	22	8	22	17	100

Almost all users of ECP in every regions were aware of family planning method. The awareness about contraceptive pills, condoms, tubectomy, and vasectomy was 100 percent. The emergency contraceptive user also know about all other contraception method also. The respondent of Dhaka was most aware of the different types of method. The awareness of different types of family planning method were relatively low n Khulna and Comilla.

### **6.2.** Reasons why respondent used their Last Emergency contraceptive pill

Table: 2: Reasons of using Emergency contraceptive pill

	ECP
Highly effective	14.3
Husband said so / bought it	25.0
Suggested by the doctor	14.3
Available everywhere/easily available	25.0
Got inspired by advertisement	7.1
No side-effects	7.1
Suits my body	10.7
Suggested by relatives	7.1
No dizziness	7.1
No vomiting tendency	7.1
Known brand	14.3
Base-User of ECP	28

The reason why respondents were using emergency contraceptive pill husband bought it or they said so. 25% respondents were using ECP because of their husband. Availability was also one of the man reasons. 25% were using ECP because it is available everywhere. Inspired by the advertisement, suits body were some other causes.

### **6.3.** Features of Emergency contraceptive pill that influenced its consumers

Table 3: Influencing features of Emergency contraceptive pills

Features	ECP User %
Highly effective	42.9
No dizziness	42.9
Suits my body/no threat to my body	21.4
No vomiting tendency	28.6
No side-effects	17.9
No weakness	7.1
Have regular period	14.3
Available in affordable price/cheap	7.1
Can breastfeed my baby	0.0
Base-User of ECP	28

"Highly effective", "no dizziness" and "suits my body/no threat to my body" were the most mentioned likes noticed. 42.9% respondent answered that it is highly effective. Similarly 42.9% respondents said that it has no dizziness.28% were using emergency contraceptive pills because it has no vomiting tendency. 21% respondents were using ECP because it suits their body. Other reasons were no side effects, no weakness, have regular period and availability.

#### 6.4. Features of emergency contraceptive pills what respondents disliked

Table 4: Reasons for Disliking of emergency contraceptive pills

	ECP
Dizziness	44.4
Body feels weak	33.3
Irregular periods	22.2
Vomiting tendency	22.2
Feels strong sensation in head	0.0
Headache	11.1
Body feels stiff	0.0
Base - Those have dislikes for last used brand	9

There were also questions if there are some features what they may dislike. Dizziness was the number one disliking factor. Almost 45% respondents dislike ECP because of dizziness. Second disliking factor was body feels weak, almost 34% respondent told that they feel weakness after taking ECP. The complaint of having irregular periods and vomiting tendency were almost 22%. Other disliking factors were headache and body feels stiff.

#### 6.5. Source of influence for using emergency contraceptive pills

Table 5: Influencer of emergency contraceptive pills

	Dhaka	Chittagong	Rajshahi	Khulna	Comilla	All
Doctor	54.8	31.8	25.0	27.3	35.3	38.0
Husband	29.0	45.5	62.5	36.4	29.4	37.0
Advertisement	32.3	18.2	62.5	13.6	64.7	33.0
Relatives	0.0	22.7	12.5	9.1	29.4	13.0
Health Staff	3.2	9.1	0.0	4.5	23.5	8.0
Neighbour	9.7	4.5	0.0	9.1	0.0	6.0
Base-User of ECP	31	22	8	22	17	100

Doctor and husband were the main source of influence to use current brand, followed by advertisement. In Dhaka doctor (54.8%) was the main influencer followed by advertisement (32.3%) and husband (29%). In Chittagong husband was the main influence point (45.5%) followed by doctor (31.8%). Husband and advertisement has the same influence in case of ECP users of Rajshahi (both 62.5%). Overall doctor, husband and the advertisement has almost same influence in using an emergency contraceptive pill.

#### 6.6. Side effects of emergency contraceptive pills what respondents feel?

Table 6: Side effects of emergency contraceptive pills

	ECP users %
Dizziness	50.0
Body feels weak	33.3
Vomiting tendency	50.0
Headache	16.7
Irregular periods	0.0

Body feels stiff	0.0
Feels strong sensation in head	0.0
High outflow of blood during period	0.0
emergency contraceptive pills Base-Those aware about side effects of their last used brand	6

The most mentioned side effects are 'Dizziness' (50%), and 'Vomiting feeling' (50%) followed by 'Body feels week' (33%) and. Physical side effects of ECP were main.

# 6.7. How many times respondents buy emergency contraceptive pills in a month

Table 7: Frequency of purchasing

	Dhaka	Chittagong	Rajshahi	Khulna	Comilla	All
More than once a month	6.5	9.1	12.5	18.2	5.9	10.0
Once a month	9.7	45.5	0.0	45.5	35.3	29.0
Once in two months	9.7	9.1	25.0	13.6	29.4	15.0
Once in three months	16.1	27.3	37.5	9.1	17.6	19.0
Once in 6 months	35.5	0.0	0.0	0.0	0.0	11.0
Not applicable	22.6	9.1	25.0	13.6	11.8	16.0
Base-User of ECP	31	22	8	22	17	100

It is surprising that almost 10% respondents purchase emergency contraceptive pills more than once in a month. Highest percentages of respondents of Rajshahi (12.5%) and Khulna (18.2%) are purchasing more than once in a month. The lowest percentage of purchasing more than in a month in Comilla (5.9%). Highest percentages of respondents purchase in a month in Chittagong and Khuna (45%). Some respondent's uses emergency contraceptive

pills in once in two or three months. There are some respondents who are using emergency contraceptive pills once in six months. Most of the respondents have purchased once in a month.

#### 6.8. Who Buy ECP for Respondents

Table 8: ECP purchasing person for users

	Dhaka	Chittagong	Rajshahi	Khulna	Comilla	All
Husband	100.0	86.4	75.0	81.8	64.7	85.0
Myself	0.0	9.1	25.0	18.2	17.6	11.0
Both	0.0	4.5	0.0	0.0	17.6	4.0
Base-User of ECP	31	22	8	22	17	100

Mainly 'Husbands' purchase emergency contraceptives. In Dhaka 100% respondent told that their using ECP mainly purchased by their husband. In Chittagong almost 87% user's husband purchase ECP for them. In 4.5% cases both of them purchase ECP. In Rajshahi, Khulna, Comilla main purchasing person is husband. Overall in 85% cases main purchase point is husband followed by user themselves.

#### 6.9. Awareness of Family Planning Method among condom users

Table 9: Awareness of Family Planning Method

	Dhaka	Chittagong	Rajshahi	Khulna	Comilla	All
Condom	100.0	100.0	100.0	100.0	100.0	100.0
Oral Contraceptive	100.0	100.0	100.0	100.0	100.0	100.0
Injection	92.0	86.0	80.0	81.0	98.0	87.4
Tubectomy	95.0	68.0	75.0	73.0	100.0	82.2
Vasectomy	97.0	72.0	71.0	67.0	95.0	80.4
Natural through Abstinence	70.0	79.0	84.0	74.0	98.0	81.0
Norplant	64.0	42.0	36.0	25.0	81.0	49.6
IUD	66.0	35.0	28.0	11.0	42.0	36.4
Withdraw	43.0	78.0	81.0	37.0	52.0	58.2
Don't know	0.0	4.0	1.0	2.0	0.0	1.4
Base-User of Condom	100	100	100	100	100	500

All the condom users are fully aware of family planning method. They are also aware about different types of family planning method. The highest percentages of awareness among different types of family planning method were condom, oral contraceptives, injection. Dhaka has the highest percentages of awareness about different types of planning method. The other regions have also almost 100% awareness. They use condom as a part of family planning.

#### 6.10. Sexual Behavior pattern of condom users:

Table 10: Frequency of Using Condom during Sex

	User % of condoms
Always	50.4
Most of the time	38.8
Sometimes	9.6
Less frequently	1.2
Base-User of Condom	500

If we analyze the sexual behavior pattern of condom users we can see that almost 50% user's uses condoms during their every sex. There are also some users who do not uses condoms always. Almost 39% user uses condoms most of the time during their sex. There are 9.6% users who uses condoms sometimes and 1.2% user's uses less frequently.

#### **6.11.** Source of influence for using condoms

Table 11: Influencer

	Dhaka	Chittagong	Rajshahi	Khulna	Comilla	All
From friend	14.0	10.0	43.0	40.0	57.0	32.8
Advertisement	24.0	16.0	10.0	49.0	25.0	24.8
From medicine shopkeeper	18.0	11.0	29.0	11.0	18.0	17.4
Doctor	19.0	33.0	5.0	8.0	3.0	13.6
Wife	13.0	9.0	7.0	20.0	15.0	12.8
Health worker	12.0	12.0	6.0	10.0	9.0	9.8
From nobody	1.0	17.0	4.0	5.0	0.0	5.4
Base-User of condom	100	100	100	100	100	500

Friends and advertisement were the main source of influence to use current brand. Medicine shopkeeper, doctors, wife, health worker were also important. Almost 33% user got

influenced by friends followed by advertisement and shopkeeper. In Khulna highest percentages of user almost 50% got influenced by the advertisement. In Rajshahi, Khulna, Comilla most of the users were influenced by their friends for using condoms.

#### **6.12. Purchase behavior and pattern**

Table 12: Frequency of Purchasing Condom

	Dhaka	Chittagong	Rajshahi	Khulna	Comilla	All
Twice in a week	5.0	3.0	10.0	7.0	7.0	6.4
Once in a week	45.0	75.0	65.0	57.0	46.0	57.6
Twice in a month	32.0	10.0	10.0	16.0	27.0	19.0
Once in a month	15.0	12.0	14.0	12.0	16.0	13.8
Less frequent than once in a month	3.0	0.0	1.0	8.0	4.0	3.2
Base-User of condom	100	100	100	100	100	500

Majority of the respondents purchase condom once a week or twice a month. In Chittagong highest percentages of respondents among all regions (75%) purchase condoms once in a week followed by Rajshahi (65%), Khulna (57%), Comilla (46%). Overall 57% users purchase condoms once in a week followed by twice in a month.

#### **6.13.** Quantity of Condom Purchased at a time

Table 13: Quantity of Condom Purchased by respondents

	Dhaka	Chittagong	Rajshahi	Khulna	Comilla	All
I packet	40.0	71.0	67.0	50.0	35.0	52.6
2 packets	26.0	15.0	23.0	36.0	36.0	27.2
More than 2 packets	34.0	14.0	10.0	14.0	29.0	20.2
Base - User of condom	100	100	100	100	100	500

One pack is most common, followed by two. Overall 52.6% respondents purchase one packet at a time, followed by 2 packet (27%).

#### **6.14.** Condom buying person for users:

#### **Table 16: Who Buy Condom for respondents?**

Most of the respondents purchase condom themselves.

	Dhaka	Chittagong	Rajshahi	Khulna	Comilla	All
Self	100.0	99.0	96.0	90.0	92.0	95.4
Buy through other	0.0	0.0	0.0	10.0	6.0	3.2
Both	0.0	1.0	4.0	0.0	2.0	1.4
Total	100	100	100	100	100	500

Almost 95% time respondent buy condoms for themselves. In 3.2% cases users buy condoms by other and in 1.4% cases husband and wife both purchase condoms.

### Chapter 7:

# Discussion & conclusion

#### 7. Discussion and Conclusion

Our study shows that, in general, the studies analyzed present limited results that do not allow a clear, detailed picture to emerge of the characteristics of women using EC. Study results show great variability reflecting the various contexts in which the studies have been performed and cover primary care emergency departments, hospital emergency rooms, family planning centers, the general population, the university population, and secondary school students. This could explain, in turn, the considerable variability in the estimated parameters.

- New users of condom previously used OCP.
- New users of OCP were from condom, followed by injection.
- Most of the ECP users previously used condom, followed by OCP.

Almost all users of ECP in every regions were aware of family planning method. The awareness about contraceptive pills, condoms, tubectomy, and vasectomy was 100 percent.. The awareness of different types of family planning method were relatively low n Khulna and Comilla.

All the condom users are fully aware of family planning method. They are also aware about different types of family planning method. The highest percentages of awareness among different types of family planning method were condom, oral contraceptives, injection. Dhaka has the highest percentages of awareness about different types of planning method. The other regions have also almost 100% awareness. They use condom as a part of family planning. The reason why respondents were using emergency contraceptive pill husband bought it or they said so. 25% respondents were using ECP because of their husband. Availability was also one of the man reasons. 25% were using ECP because it is available everywhere. Inspired by the advertisement, suits body were some other causes.

"Highly effective", "no dizziness" and "suits my body/no threat to my body" were the most mentioned likes noticed. 42.9% respondent answered that it is highly effective. Similarly 42.9% respondents said that it has no dizziness.28% were using emergency contraceptive pills because it has no vomiting tendency. 21% respondents were using ECP because it suits their body. Other reasons were no side effects, no weakness, have regular period and availability.

. Dizziness was the number one disliking factor. Almost 45% respondents dislike ECP because of dizziness. Second disliking factor was body feels weak, almost 34% respondent told that they feel weakness after taking ECP. The complaint of having irregular periods and vomiting tendency were almost 22%. Other disliking factors were headache and body feels stiff.

Doctor and husband were the main source of influence to use current brand, followed by advertisement. In Dhaka doctor (54.8%) was the main influencer followed by advertisement (32.3%) and husband (29%). In Chittagong husband was the main influence point (45.5%) followed by doctor (31.8%). Husband and advertisement has the same influence in case of ECP users of Rajshahi (both 62.5%). Overall doctor, husband and the advertisement has almost same influence in using an emergency contraceptive pill.

It is surprising that almost 10% respondents purchase emergency contraceptive pills more than once in a month. Highest percentages of respondents of Rajshahi (12.5%) and Khulna (18.2%) are purchasing more than once in a month. The lowest percentage of purchasing more than in a month in Comilla (5.9%). Highest percentages of respondents purchase in a month in Chittagong and Khuna (45%). Some respondent's uses emergency contraceptive pills in once in two or three months. There are some respondents who are using emergency contraceptive pills once in six months. Most of the respondents have purchased once in a month.

Mainly 'Husbands' purchase emergency contraceptives. In Dhaka 100% respondent told that their using ECP mainly purchased by their husband. In Chittagong almost 87% user's husband purchase ECP for them. In 4.5% cases both of them purchase ECP. In Rajshahi, Khulna, Comilla main purchasing person is husband. Overall in 85% cases main purchase point is husband followed by user themselves

If we analyze the sexual behavior pattern of condom users we can see that almost 50% user's uses condoms during their every sex. There are also some users who do not uses condoms always. Almost 39% user uses condoms most of the time during their sex. There are 9.6% users who uses condoms sometimes and 1.2% users uses less frequently.

Friends and advertisement were the main source of influence to use current brand. Medicine shopkeeper, doctors, wife, health worker were also important. Almost 33% user got influenced by friends followed by advertisement and shopkeeper. In Khulna highest percentages of user almost 50% got influenced by the advertisement. In Rajshahi, Khulna, Comilla most of the users were influenced by their friends for using condoms.

Majority of the respondents purchase condom once a week or twice a month. In Chittagong highest percentages of respondents among all regions (75%) purchase condoms once in a week followed by Rajshahi (65%), Khulna (57%), Comilla (46%). Overall 57% users purchase condoms once in a week followed by twice in a month.

Almost 95% time respondent buy condoms for themselves. In 3.2% cases users buy condoms by other and in 1.4% cases husband and wife both purchase condoms.

# **Chapter 8:**

# Reference

#### 8. References:

Aiken, A., Lohr, P., Aiken, C., Forsyth, T. and cccc. (2007) *Contraceptive method preferences and provision after termination of pregnancy: a population-based analysis of women obtaining care with the British Pregnancy Advisory Service*. BJOG: An International Journal of Obstetrics & Gynaecology

Andersch, B. and Milsom, I. (1982). *Contraception and pregnancy among young women in an urban Swedish population. Contraception*, 26(3), pp.211-219

Encyclopedia Britannica. (2016). *ductus deferens / anatomy*. Available at: https://global.britannica.com/science/ductus-deferens

Glasier A (1997) Emergency Postcoital Contraception. N Engl J Med, 337(15):1058–1064

Goldstein, R., Upadhyay, U. and Raine, T. (2013). With Pills, Patches, Rings, and Shots: Who Still Uses Condoms? A Longitudinal Cohort Study. Journal of Adolescent Health, 52(1), pp.77-82

Hubacher, D. and Trussell, J. (2015). A definition of modern contraceptive methods. *Contraception*, 92(5), pp.420-421

Lindh, I., Skjeldestad, F., Gemzell-Danielsson, K., Heikinheimo, O., Hognert, H., Milsom, I. and Lidegaard, Ø. (2016). *Contraceptive use in the Nordic countries*. Acta Obstetricia et Gynecologica Scandinavica

Melissa Conrad Stöppler, M. (2016). *Birth Control Pills (Oral Contraceptives): Drug Facts, Side Effects and Dosing.* 

Nearns, J. (2009). Health insurance coverage and prescription contraceptive use among young women at risk for unintended pregnancy. *Contraception*, 79(2), pp.105-110.

Opentextbc.ca. (2016). 28.2 Embryonic Development /28-2-embryonic-development

Paxton, S., Adele, and Peckham, M. (2016). The Leeds Histology Guide

Paul, C., Skegg, D. and Spears, G. (1995). *Oral contraceptive use and risk of breast cancer in older women (New Zealand)*. Cancer Causes and Control, 6(6), pp.485-491.

Scanlon, V. and Sanders, T. (2007). *Essentials of anatomy and physiology*. 1st ed. Philadelphia: F.A. Davis Co.

Speizer, I., Nanda, P., Achyut, P., Pillai, G. and Guilkey, D. (2012). Family Planning Use among Urban Poor Women from Six Cities of Uttar Pradesh, India. Journal of Urban Health, 89(4), pp.639-658.

Trussell J, Ellertson C (1995) *Efficacy of emergency contraception – topical review*. Fertility Control Reviews, 4(2):8–11.

Trussell J, Raymond EG (1999) Statistical Evidence about the Mechanism of the Yuzpe Regimen of Emergency Contraception. Obstet Gynecol, 93:872–876.

Vogt, C. and Schaefer, M. (2011). Disparities in knowledge and interest about benefits and risks of combined oral contraceptives. *The European Journal of Contraception & Reproductive Health Care*, 16(3), pp.183-193.

WHO, (2014), Contraception: Issues in Adolescent Health and Development, Emergency contraception.

Yoshida, H., Sakamoto, H., Leslie, A., Takahashi, O., Tsuboi, S. and Kitamura, K. (2016). Contraception in Japan: Current trends. *Contraception*, 93(6), pp.475-477.