# Knowledge and Practice Regarding Emergency Contraception among Higher Secondary Students of Selected Government Schools of Godawari Municipality

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#### ABSTRACT

**Introduction:** Unintended teenage pregnancy and abortion is one of the global issues in present context. Emergency contraception is the only post coital method to prevent unintended pregnancy and abortion related complications. Being one of the most appropriate methods of contraception its access and awareness among adolescents is still limited.

**Methods:** A descriptive cross sectional study design was conducted. Sample size of the study was 396 students from selected higher secondary schools. Probability sampling technique (lottery method) was used. The semi-structured self-administration questionnaire was used for data collection.

**Results:** All most all (97.2%) the respondents had heard about emergency contraception and the most common source was school (48.4%). Only 40.5 % knew about the appropriate time to use ECPs. Minority (1.3%) of the respondents had good knowledge regarding emergency contraception, 21.8% had satisfactory knowledge and 76.9% had poor knowledge. More than half (55.6%) said EC causes abortion. Male had more knowledge as compared to female. Out of 396, only 1.8% of the respondents had practiced emergency contraception.

**Conclusion:** Although all most all had heard about emergency contraception (EC) their overall knowledge was poor especially on dose of EC. Minority of the respondents had good knowledge and more than half had misconception regarding emergency contraception which puts them in risk of unintended pregnancy and abortion related complications. Complete education at school should be provided in order to improve knowledge and awareness on emergency contraception among adolescents.

Key words: Knowledge, Practice, Emergency contraception, higher secondary students.

#### **INTRODUCTION**

Emergency contraception refers to methods of contraception that can be used to prevent pregnancy after unprotected sexual intercourse. These are recommended for use within 5 days but are more effective the sooner they are used after the act of intercourse. The emergency contraception prevents pregnancy by preventing or delaying ovulation and they don't induce abortion (World Health Organization 2017). Two types of emergency contraceptives are available. mechanical They are and hormonal method. The mechanical method is intrauterine device and hormonal method is of two types. They are progestin pills containing 0.75 levonorgestrel and combined oral contraceptive pill containing progestin 0.3mg and ethinyl estrogen 0.03mg in each. Among all the IUCD is highly effective (99.4%), followed by COC (98%) and levonorgestrel being the least

(97%). Emergency contraception is the only post coital drug; it is easily available and accessible over the counter drug. It prevents pregnancy after unprotected sex. Hence it is one of the appropriate methods for teenagers who cannot access other family planning method (Ghimire, 2014).

Emergency contraceptive was introduced in Nepal a decade ago in the year 2004 by private sector and its trend has increased since 2009 with the introduction of **ECON** in Nepal. Emergency contraception also known as post coital contraception is available over the counter in Nepal. On the other hand, Nepal is a country where premarital sex is a taboo. Teenagers who engage in such activities are not much accepted in the society. There are various barriers for adolescents to approach emergency contraception. The clearly mentioned name and familiar packaging of the pills itself has made it difficult for teenagers to approach it (CRS Nepal, 2015).

In United States,6 million women are of child bearing age and 70% of them are in the risk of unintended pregnancy. In the year 2011, 45% pregnancies were unintentional and 42% of them ended in abortion. Some emergency contraception are available over the counter and one out of nine sexually active reproductive age women has used it. The use is high among 20 to 24 age group adolescents (23%) (Daniels, Daugherty, & Jones, 2014).

In United Kingdom, contraceptive services are available free under the National health services since 1974, and 74% of reproductive age women use some form of contraception (Rowlands, October 2007). England having one of the highest teenage pregnancy rate has 24 out of 1000 18-19 years women are provided with emergency contraception("Contraception in the United Kingdom (UK) - Statistics & amp; Facts | Statista," n.d.).

In India only 52.4% couples use contraception methods. India is working in best possible way in the family planning sector ("WHO | Contraceptive prevalence," 2016). However the contraception use among male has declined and the rate of abortion and emergency contraception has risen in eight years period. Around 2 million emergency pills were sold nationwide in the year 2016 (Gupta, 2017).

In Nepal women on average start sexual activity at the age of 17 to 19 and 51% have sex before the age of 18. Due to lack of education and awareness one in five girls under 18 give birth and 17% of adolescent women are already mothers.53% of married women use any one family planning method and among which 43% use modern method whereas 10% use traditional one. The choice of method varies according to the education level and for birth spacing and birth control the demand of family planning is 76% in Nepal(NDHS, 2016). According to DHS, only 0.1% women have used emergency contraception and 28.8% women were found to have knowledge about it in the year 2011.

Adolescence is a crucial phase and a period for the physical, psychological, and social maturation. Adolescents face various challenges during this phase and the proper care and support provided to them at this phase determines their future life as well as their health. Teenage is the most active phase of life and most of the things are unpredicted and unintended which may bring out certain issues and expose them to risks including unsafe sexual behavior. Adolescents should have proper knowledge and access to family planning regardless of their marital status in order to prevent them various risks. Emergency from contraception's knowledge and access can be a trend setter to decrease the risk of unintended pregnancy and abortion among adolescent.

# MATERIALS AND METHODS

This was a descriptive crosssectional school based study conducted in government school to assess the knowledge and practice of emergency contraception.

#### **Study Population**

This study included all the students of grade 11 and grade 12 of Shree Buddha

Secondary School, Bani Bilas Secondary School, Shree Chhampidevi Secondary School, Shree Bajra Barahi Higher Secondary School and Shree Devi Higher Secondary School of Godawari Municipality.

# Study Area

Nepal is a small landlocked country with diverse geographical variation. It has been divided into seven provinces and Lalitpur district falls under province 3. This research was conducted in the government school of Godawari municipality of Lalitpur district. Godawari is 10 km away from Lagan Khel Bus Park.

### Sample Size

396 students of grade 11 and grade 12.

### Inclusion criteria:

- This study included all the students of grade 11 and grade 12 of selected schools of Godawari municipality.
- Students who were interested to participate in the study.

### **Exclusion criteria:**

- Those students who were not interested to participate in the study.
- Those students who were absent on the day of data collection.

# **Data Collection Tools and Technique**

• The primary data was collected using semi-structured questionnaire and self-administration technique was used.

#### Ethical Consideration

For ethical consideration,

- The research was conducted only after the approval from the research committee of Asian College for Advance Studies and NHRC(Nepal health and Research Council)
- Verbal and written consent was taken from the respected colleges prior to data collection and verbal consent will be taken from the respondents.
- The objectives of the study were clearly informed to the respondents.
- The confidentiality of the data was maintained strictly.

• No any feelings, cultural and ethical values and norms were harmed during the study.

Analysis of data: SPSS software was used to analyze the collected data according to the objectives and data was presented in frequency percentage table.

**Period of data collection:** 2018 February 27<sup>th</sup> to march 14<sup>th.</sup>

### RESULTS

In this study, Majority (97.2) had heard about emergency contraception and just minority (2.8%) of them had not heard about it. Nearly half (47.8%) of the respondents said the meaning of emergency contraception is contraception used after unprotected sex and minority of them (8.1%) said emergency contraception as a means of contraception for teenagers. More (57.9%) respondents than half said emergency contraception is used in case of unavailability of other methods and one fourth (23.7%)of them mentioned emergency contraception is used in case of condom slippage. More than half of the respondents (75.3%) mentioned incorrect dose of emergency contraception and one (24.7%)of the respondents fourth mentioned correct dose of emergency contraception. Regarding correct timing, more than half of the respondents (59.5%) mentioned incorrect timing and less than half (40.5%) of them mentioned correct timing to use emergency contraception. Maximum (86.2%) of the respondents knew the side-effects of emergency about contraception and 13.8% didn't know about it. Among 332 respondents, around half (48.1%) mentioned dizziness as a most side-effects common and one third (30.2%) of the respondents mentioned nausea as least common side-effects of emergency contraception.

Among 385 respondents, more than half (60.6%) of the respondents mentioned health-post as source of emergency contraception and less than half (44.2%) said clinics as source of emergency contraception. Similarly, more than half

(60.5%) respondents mentioned that ECPs are available around their locality and 39.5% of them mentioned that they didn't have ECPs available nearby them. Among 233 respondents, 39.92 % said they have nearby and 12.44% health-post have hospitals for ECP. Majority 385 respondents, almost half (48.4%) of the respondents about heard emergency contraception from school and minority (4.5%) of them heard from family. Among of the respondents have poor 76.9% knowledge regarding emergency contraception, one third (21.8%) of them have fair knowledge and minority (1.3%) of them have good knowledge regarding emergency contraception bought ECP from pharmacy and 14.3% bought it from healthpost. More than half (57.1%) respondents bought ECP from source less than 30 min away and 14.3% bought it from place more than 1 hour away. all most all the respondents had not used emergency contraception and least (1.8%)of the respondents had at least once used emergency contraception

Association between knowledge and practice, knowledge was not associated with practice as the p-value is greater than 0.05.Association between Practice and Accessibility of resources; practice was associated with accessibility of resources as the p-value is less than 0.05.

Table 1. Specific Knowledge of Emergency contraception n = 396					
Variables	Frequency	Percentage (%)			
Heard about emergency contraception					
Yes	385	97.2			
No	11	2.8			
Meaning of EC $(n = 385)$					
Contraception used after unprotected sex	184	47.8			
Regular means of contraception	56	14.5			
Contraception for teenagers	31	8.1			
Contraception causing abortion	74	19.2			
Contraception which prevents from HIV/Aids	40	10.4			
Indication of EC *					
Unavailability of other methods	217	57.9			
Condom breakage	116	30.9			
Condom slippage	89	23.7			
In case of sexual assault	169	45.1			
Dose of Emergency contraception					
Correct dose	95	24.7			
Incorrect dose	290	75.3			
Appropriate Time					
Correct timing	154	40.5			
Incorrect timing	231	59.5			

\* Multiple responses

Table 2, Availability and Accessibility of Emergency Contraception n = 385

puon n – 365		
Variables	Frequency	Percentage (%)
*Available P	lace	
Hospital	206	55.5
Health-post	225	60.6
Pharmacy	212	57.1
Clinics	164	44.2
Accessibility	in locality	
No	152	39.5
Yes	233	60.5
*Accessible	source (n=23	3)
Clinic	39	16.74
Health-post	93	39.92
Hospital	29	12.44
Pharmacy	72	30.90
*	Multiple room	0.000

<sup>\*</sup>Multiple responses

Table 3. Knowledge on Side-effects of Emergency Contracention n - 385

ontraception n = 505		
Variables	Frequency	Percentage (%)
Side-effects of Emergency co	ontraception	
Yes	332	86.2
No	53	13.8
Side-effects $*$ (n = 332)		
Vomiting	130	40.1
Nausea	98	30.2
Dizziness	156	48.1
Excessive vaginal bleeding	149	46.0
Abdominal pain	147	45.4

\* Multiple responses

Table 4. Source of information About EC n = 385

Source of Information *	Frequency	Percentage (%)
School	249	48.4
Television	127	24.7
Internet	71	13.8
Friends	44	8.6
Family	23	4.5

\* Multiple responses

Table 5. R 396	espondent	ever used En	nergency Contrac	eption n =
	Category	Frequency	Percentage (%)	
	No	279	08.2	

1.8

Table 6.Overall Knowledge on Emergency Contraception n = 385

Knowledge level	Frequency	Percentage (%)	
Good	5	1.3	
Satisfactory	84	21.8	
Poor	296	76.9	
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Mean: 17.84; Median: 17; Standard deviation: 5.49; Minimum: 6; Maximum: 39

Variables		practice of respondents		chi square value	p-value
		No n (%)	Yes n (%)		
Knowledge of respondents	Poor	291(98.3%)	5(1.7%)	0.119	.730
	Good	87(97.8%)	2(2.2%)		
P< 0.05					

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Variables		Practice of emergency contraception		chi square value	p-value
		No n (%)	Yes n (%)		
Accessibility of resources	No	152(100.0%)	0(.0%)	4.651 <sup>a</sup>	0.031
-	Yes	226(97.0%)	7(3.0%)		

P< 0.

#### **DICUSSION**

Yes

Descriptive cross-sectional study was conducted among 396 higher secondary students of selected government school of Godawari municipality. The aim of the study was to access the knowledge and practice regarding emergency contraception. Out of total respondents, all most all (97.2) had heard about emergency contraception and minority (2.8%) of them had not heard about it. Among those who has heard about contraception emergency almost half (48.4%) of the respondents heard about emergency contraception from school and minority (4.5%) of them heard from family. This finding is supported by the study conducted by Yapici et al. 2010 where the main source of knowledge was school. Nearly half (47.8%) of the respondents said the meaning of emergency contraception is contraception used after unprotected sex and minority of them (8.1%) said emergency contraception as a means of contraception for teenager. Majority (81.3%) of the respondents had heard about the emergency contraception available in Nepal and one fourth (18.7%) of them were unaware of it.

Maximum (86.2%) of the respondents knew about the side-effects of emergency contraception and 13.8% didn't know about it. Among 332 respondents, around half (48.1%) mentioned dizziness as

a most common side-effects and one third (30.2%) of the respondents mentioned nausea as least common side-effects of emergency contraception. This finding is contrast to the study conducted by Miller, 2011 where only few knew about the sideeffects of Emergency contraception. This study reveals that majority (72.7%) of the respondents believed that emergency contraception cannot be used daily and one fourth (27.3%) of the respondents believed that they can be used on daily basis. Similarly, almost half (55.6%) of the respondents believed that emergency contraception causes abortion and 44.4% believed that it doesn't cause abortion. Out of 385 respondents, 64.9% respondents believed that emergency contraception doesn't prevent from HIV/Aids and one third (35.1%) of the respondent believed that it prevents from HIV/Aids. This study is in contrast to the study done by Joseph et al., 2016 where 33.3% respondents said that ECPs do not prevent from STDs.

Among 385 respondents, more than half (60.6%) of the respondents mentioned health-post as source of emergency contraception as and less than half (44.2%) said clinics as source of emergency contraception. Likewise, more than half (60.5%) respondents mentioned that ECPs are available around their locality and

39.5% of them mentioned that there were not ECPs available nearby them. The study shows that among 396 respondents, all most all the respondents had not used emergency contraception and least (1.8%) of the respondents had at least once used emergency contraception. This finding is supported by the study conducted by Durosinlorun Amina & Regmi, 2014 where only 15.2% had used emergency contraception.

### CONCLUSION

On the basis of the data findings it is concluded that although all most all had heard about emergency contraception more than half of the respondents had poor knowledge, one third of the respondents had fair knowledge and minority of the respondents had good knowledge regarding emergency contraception. Even though the overall knowledge was poor, nearly half of them knew about meaning and indication of the emergency contraception. Male had more knowledge as compared to female. Minority of respondents had practiced emergency contraception.

Students had practice regardless of the poor knowledge and those who have accessibility to emergency contraception had used it. Statistically association was found between practice and accessibility of emergency contraception and no statistical association was found between knowledge and practice.

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