

Research Article

## Knowledge, Attitude, and Behaviour of Midwives towards Emergency Contraception

### *Tingkat Pengetahuan, Sikap dan Perilaku Bidan terhadap Kontrasepsi Darurat*

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#### Abstract

**Objective :** To investigate the level of knowledge, attitude, and behaviour of midwives to emergency contraception in Indonesia.

**Methods :** This study used a cross-sectional design. Subjects were midwives who worked in the District Cipondoh Tangerang, Banten, Indonesia until the number of subjects is met at least 100 people. The data were collected by using written questionnaires made by researchers based on previous studies with similar themes. The data obtained will be reported descriptively for categorical variables. The analysis results are presented in the form of sum (n) and percentage (%) (proportion).

**Results :** Of the 100 respondents who answered the questionnaire, 83% of the midwives had a good knowledge of the condition. Good midwife attitude toward EC in public health care and private practices were 84.62% and 85.06%, respectively. Accordingly, the good behaviour shown by midwives in public health care and private practice is 100% and 94.25%. However, from the question qualitatively the level of knowledge, attitude and behaviour of midwives is still classified as less.

**Conclusions :** The level of knowledge, attitude and behaviour of midwives towards emergency contraception is said to be lacking. Training on EC on midwives is still needed for practical use in the community.

**Keywords :** emergency contraception, midwife, unwanted pregnancy, uterine contraception

#### Abstrak

**Tujuan :** Mengetahui tingkat pengetahuan, sikap, dan perilaku bidan terhadap kontrasepsi darurat di Indonesia.

**Metode :** Penelitian ini menggunakan desain potong lintang dengan pengambilan sampel berturut-turut. Peneliti mengambil semua subjek yaitu bidan yang bekerja di wilayah Kecamatan Cipondoh Kabupaten Tangerang sampai jumlah subjek minimal terpenuhi sebanyak 100 orang. Pengambilan data dilakukan dengan menggunakan kuesioner tertulis yang dibuat oleh peneliti berdasarkan penelitian-penelitian terdahulu dengan tema serupa. Data yang diperoleh akan dilaporkan secara deskriptif untuk variable kategorik. Hasil analisis disajikan dalam bentuk jumlah (n) dan persentase (%) (proporsi).

**Hasil :** Dari 100 responden, 83% bidan mempunyai pengetahuan yang baik terhadap kontrasepsi darurat. Sikap bidan yang baik terhadap kontrasepsi darurat di puskesmas dan di praktik swasta adalah 84,62% dan 85,06%, berturut-turut. Sejalan dengan itu, perilaku yang baik ditunjukkan oleh bidan di puskesmas dan di praktik swasta adalah sebesar 100% dan 94,25%. Namun dari pertanyaan secara kualitatif tingkat pengetahuan, sikap dan perilaku bidan masih tergolong kurang.

**Kesimpulan :** Tingkat pengetahuan, sikap dan perilaku bidan terhadap kontrasepsi darurat dikatakan masih kurang. Masih dibutuhkan pelatihan tentang kontrasepsi darurat pada bidan agar penggunaannya efektif di masyarakat.

**Kata kunci :** alat kontrasepsi dalam rahim, bidan, kehamilan tidak diinginkan, kontrasepsi darurat.

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#### INTRODUCTION

Pregnancy is the birth right of all women, so every woman has the right to determine her reproductive health problems, including determining when she is pregnant and what contraceptive protection she will use. If the pregnancy is not planned, or contraception fails

to protect it, then this pregnancy can undoubtedly cause problems.<sup>1</sup>Data in the United States that the incidence of unwanted pregnancy as much as 46% of the total number of births in 2006 (CDC).<sup>2</sup> In one study it was suggested that unwanted pregnancies would harm pregnancies, the child to be born, and directly to social health.<sup>3</sup>

Unwanted pregnancies bring new problems,

termination of pregnancy, whether done by medical personnel and non-medical personnel. The act of illegal abortion can pose a danger of complications and is one of the most important causes of maternal morbidity and mortality.<sup>4</sup>In addition, unwanted pregnancy is associated with an increased risk of low birth weight, and preterm delivery was significantly higher among children and delays and poor lactation in mothers.<sup>5-7</sup>

One of the most effective methods to solve with the adverse effects of pregnancy events is Emergency Contraception (EC).<sup>8</sup> These contraceptives can be used after a partner has sexual intercourse without contraceptive protection, and offers a second chance to prevent an unwanted pregnancy.<sup>9</sup>To support the use of EC, medical workers are needed to be placed on the front lines, especially in the field of women's reproductive health; among others, one of them is a midwife. Through the existing study data show not much research conducted to know the knowledge of midwife about EC, therefore midwife as medical personnel in the front line in Indonesia needs to know the knowledge of EC so that the use of EC on well prepared and can reduce the number of adverse pregnancy events in particular in Indonesia country.

## METHODS

This study is a cross-sectional study conducted from January to August 2017 in Tangerang District. The minimum subject used in this research is at least ten samples according to the big sample count. The research was conducted at the Public Health Center and Clinic of the private midwife in Tangerang Regency. The study period started from January 2017 until August 2017. The affordable population was then divided into two groups, midwives working in Tangerang sub-district health centres and midwives working in self-employment practices. Data were collected by using written questionnaires made by researchers based on previous studies with similar themes. In the questionnaire, there are 31 questions about knowledge (20 core questions), ten questions about attitude, and five questions about behaviour. Data analysis was performed with SPSS 20.3. Moreover, we also performed a

qualitative analysis of the questions given to the respondents.

## RESULTS

From the distribution of data on the questionnaire based on 100 respondents, the population result was 13 (13%) of the respondents working in Public Health Care, and 87 (87%) were employed in private practice. Characteristics of the subjects are presented in Table 1.

**Table 1.** Characteristics of the Subjects

Characteristics of social and demographic midwives	n	%
<b>Workplace</b>		
Public health care	13	13
Private clinic	87	87
<b>Age (yo)</b>		
20-30	40	40
31-40	32	32
41-50	13	13
>50	15	15
<b>Last education</b>		
Diploma 3	71	71
Bachelor	27	27
Master	2	2
<b>Length of work (yo)</b>		
< 5	23	23
5 – 10	41	41
10 – 20	15	15
> 20	21	21
<b>Attend contraceptive training</b>		
Ever	39	39
Never	61	61
<b>Attending Seminar</b>		
Never participate	0	0
Once a year	32	32
Four times a year	67	67
More than four times a year	1	1

The average age of respondents is predominantly in the 20-30 year age group of 40 respondents (40%). Most of the respondents had the last education background of midwifery diploma of 71 respondents (71%), followed by bachelors of 27 respondents (27%).

Distribution of long working group of respondents in the group of 5-10 years is 23 people (23%). Most of the respondents had never attended Emergency Contraception training for 61 people (61%). The average respondents had attended seminars on health, with the most frequent frequency of 4 times a year, with 67 respondents (67%).

## Midwives Knowledge of Emergency Contraception

Most of the respondents, as many as 83 people (83%), can answer questionnaires questions and categorize good knowledge of emergency contraception. The rest have sufficient knowledge of emergency contraception as much as 17 respondents (17%), and no less knowledgeable.

From the distribution of midwives' work to the knowledge of EC presented in Table 2, midwives working in public health care all had good knowledge of 13 (13%) EC. Almost all midwives working in private practice can answer all questions well, but around 17 (19.54%) of respondents from the private midwife group can only answer questions with sufficient knowledge.

**Table 2.** Midwives Knowledge of Emergency Contraception with Place of Work

		Workplace	
		Public health care (n=13) %	Private clinic (n=87) %
Knowledge	Enough	0 (0)	17 (19.54)
	Good	13 (100)	70 (80.46)
Total		13 (100)	87 (100)

Overall, midwives' knowledge is good enough, but when viewed from the question distribution in Table 3, it is known that many midwives lack the knowledge of emergency contraception.

**Table 3.** Distribution of Knowledge Questions on Emergency Contraception

	Public health midwives (n = 13) %	Private clinic midwives (n = 87) %
Never heard of emergency contraception.	13 (100)	87 (100)
Knowing the exact definition of emergency contraception	4 (30.8)	42 (48.3)
<b>Contraceptive methods are emergency contraception</b>		
Implant	13 (100)	
Condom		78 (89.7)
Tubectomy		1 (1.1)
IUD		8 (9.2)
<b>Maximum time limit for starting emergency contraceptive pills</b>		
One day after the first copulation	8 (61.5)	55 (63.2)
More than two days after copulation	5 (38.5)	27 (31)
Once diagnosed with pregnancy		5 (5.7)
One week before having sex		
<b>Emergency contraception pills on the market</b>		
Postinor		
Microgynon	13 (100)	81 (93.1)
Primolut		6 (6.9)
Neyna		
<b>What to do if the patient vomits within 2 hours of emergency contraceptive pills</b>		
Continue to the next tablet	1 (7.7)	
Repeat taking medication from the first tablet		14 (16.1)
Move to regular contraception (contraception previously used by the patient)	8 (61.5)	7 (8)
Give anti-vomiting medication and proceed to the next tablet	4 (30.8)	45 (51.7)
		21 (24.2)

Regarding midwives' attitude toward emergency contraception of the entire midwife working in Public health care is only 84.62% who have a good attitude towards emergency contraception in daily use, the rest about 15.38% have a bad attitude. Midwives who work in private practice, from 87 respondents, about 14.94% have

less attitude, and 85.06% others have a good attitude.

About midwives' behavior on emergency contraception of all midwives working at Public health care (n =) 13 has good behavior against emergency contraception in daily use, whereas according to midwife respondents working in

private practice (n = 87) about 94, 25% had good behaviours against emergency contraception in daily use, but still there was about 5.7% who behaved less against emergency contraception in the private midwife group.

## DISCUSSION

In this study, there are population between midwives who work in Public health care as many as 13 people and who work in private practice as much 87 people. According to the data of the Ministry of Health in 2016, there are quite a lot of midwives working in Tangerang Banten area, about 3914 midwives are employed in Banten.<sup>10</sup> Of the 100 respondents, approximately 83 (83%) midwives have good knowledge, 17 (17%) had sufficient level of knowledge on emergency contraception, and none had less knowledgeable levels of emergency contraception.

Concerning the workplace population on emergency contraceptive knowledge of all midwives working in public health care, 13 midwives (100%) have a good level of knowledge about emergency contraception. However, from the midwives who work in private practice as many as 87 respondents, only about 70 respondents (80.46%) who only have a good level of education, the rest have adequate education. It can be seen that the workplace has no significant difference in figures in outcomes about knowledge of contraceptive cycles. This is because, in addition to the workplace, many factors that affect the level of education, such as information that can be through print media, visual or otherwise.

Overall assessment of midwives knowledge level on emergency contraception has been good, but if we look again at each detail question, there are some interesting things in this research. In this study, all the midwives or respondents who participated in this questionnaire had already heard emergency contraception as much as 100%. But many still do not know the exact definition of emergency contraception. This is possible because it has never received a detailed study of emergency contraception at the time of midwife education. Thus, the next question remains that some small groups of respondents have not been able to specify the exact number of emergency contraception types.

Some of the questions in the knowledge of the condition has not been optimal and shows that midwife knowledge is still lacking in emergency contraception. Another thing that may need to be considered is to remind the midwife that they have competence and authority in the use of contraception, even though the authority on EC has not been written directly.

Of the ten attitude questions given in the questionnaire, statements about abortive emergency contraception are still many midwives who regard EC as an abortive substance. This is due to the lack of knowledge that will make the midwife condone a wrong understanding of EC.

Of the five questions concerning behaviour against emergency contraception shows, there are still some midwives answering questionnaires that exhibit less behaviour. The possibility is that there are still respondents who do not understand correctly about the use of emergency contraception so that the behaviour in giving emergency contraception is not optimal, especially about the provision of condensed to be stored and the prescribing of EC at the indicated 16-17-year-old teenagers.

In the midwife population working in private practice, there are still about 5.7% (n = 5) of respondents having fewer categories of emergency contraception. According to data obtained by a lack of deep understanding of EC, there are still midwives who behave poorly, such as allowing patients to store an EC for later use.

## REFERENCES

1. Erbil N, Bostan, Ö. Knowledge and behaviors of nurses and midwives with emergency contraception. *Int J Hum Scien*, 2010; 7(2) :875-83
2. Sedgh G, Singh S, Hussain R. Intended and unintended pregnancies world wide in 2012 and recent trends. *Studies in family planning*. 2014;45(3):301-14.
3. Moosazadeh M, Nekoei-Moghadam M, Emrani Z, Amiresmaili M. Prevalence of unwanted pregnancy in Iran: a systematic review and meta-analysis. *Int J Health Plan Management*. 2014; 29(3): e277-90
4. Tamire W, Enqueselassie F. Knowledge, attitude, and practice on emergency contraceptives among female university students in Addis Ababa, Ethiopia. Department of community health, Faculty of Medicine, Addis Ababa University, Ethiopia. 2007;21:111:6.
5. Gipson JD, Koenig MA, Hindin MJ. The effects of unintended pregnancy on infant, child, and parental health: our view of the literature. *Studies in family planning*. 2008;39(1):18-38.

6. Shah PS, Balkhair T, Ohlsson A, Beyene J, Scott F, Frick C. Intention to become pregnant and low birth weight and preterm birth: asystematic review. *Maternal Child Health J.* 2011;15(2):205-16.
7. Abbasi S, Chuang CH, Dagher R, Zhu J, Kjerulff K. Unintended pregnancy and postpartum depression among first-time mothers. *J Womens Health (Larchmt).* 2013;22(5):412-6.
8. Dominguez L, Downing D, Schwarz E, Trussell J, Wesley E. ARHP's Annual Reproductive Health Clinical Conference: Update on Emergency Contraception. *Contracept.* 2011; 3 :3-6
9. Nworah JAO, Sunday UM, O. Ugboaja Joseph OOMaC, Josephat A. Knowledge, attitude and practice of emergency contraception among students in tertiary schools in Anambra State Southeast Nigeria. *Int J Med Medical Scien* 2010; 2(1) :1-4
10. Data and Information Center of the Ministry of Health of the Republic of Indonesia. *Indones Health Profile* 2015; 3: 57-5.