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Awareness of Emergency Contraception in Adolescent Mothers

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ABSTRACT

Objective: To assess the proportion of adolescent mothers who had awareness of emergency contraception.

Study design: Cross-sectional descriptive study.

Materials and methods: Adolescent mothers aged 19 years or less, who visited at antenatal clinic or admitted to postpartum ward in King Chulalongkorn Memorial Hospital from October 2007 to April 2008 were enrolled in the study. Standard self-administered questionnaires were completed by all participants. Data included demographic characteristics, obstetric and contraceptive history, knowledge and opinions on emergency contraception were collected and analyzed.

Results: A total of 104 adolescent mothers were recruited. The mean age was 17.5 years and average age of their first sexual intercourse was 15.9 years. Oral contraceptive pills (58.7%) and condoms (35.6%) were the common used contraceptive methods. Most of them (84.6%) knew emergency contraception as a contraceptive method, but only 28.8% ever used emergency contraception in the past. Pharmacy (27.9%) and hospital or health office (19.2%) represented the common sources of information of contraceptive methods for these participants. Eighty two women (78.8%) thought that emergency contraception is an option to prevent unplanned pregnancy and they will use these contraceptive methods in the future.

Conclusion: Most of the adolescent mothers had awareness of emergency contraception and willing to use them in the future. Health care providers seem to be the important sources of information for these groups.

Keywords: emergency contraception, adolescent mother

Introduction

Adolescent pregnancies are common public health problem. Most of pregnancies in these young women are unintended leading to high induced abortion rate, both legally and outside the legal system, all over the world.[1] In the year 2003, the birth rate among teenagers in the United States was 41.7 births per 1,000 women,[2] while the incidence in Thailand was about 107 births per 1,000 women.[3] The high pregnancy rates in adolescents have been due to changes in sexual behaviors in this age group and lacks of appropriate contraceptive use. A survey

among 2,311 adolescents in Bangkok in the year 2001 found that 10% of surveyed adolescents had ever had sexual intercourse, 7% had never used a condom, and 2.1% of intercourse had resulted in a pregnancy.[4]

Emergency contraception (EC) is the only contraception that can reduce risk of pregnancy after unprotected intercourse or planned contraception method failed. The increasing and promotion of EC has the potential to reduce number of the unintended pregnancies.[5,6] Data from study suggested that most of adolescents lacked awareness of EC methods following an unprotected act of intercourse.[7] Many pregnancies occurring in adolescence could be prevented with appropriate EC use.[8]

There is still high number of pregnancies in Thai adolescents,[3] and rate of contraception use in these group is very low.[4] The present study was conducted to assess the proportion of adolescent mothers who had awareness of EC or known EC methods and evaluate the attitudes toward EC among these mothers.

Materials and Methods

This cross-sectional descriptive study was reviewed and approved by the Ethical Committee of the Faculty of Medicine, Chulalongkorn University. Adolescent pregnant women or mothers aged 19 years or less, who visited at antenatal clinic or admitted to postpartum ward in King Chulalongkorn Memorial Hospital from October 2007 to April 2008, were recruited. Sample size of 101 cases was calculated from using the proportion (61%) of participants who had heard of EC in previous study[9] with alpha of 0.05 and an acceptable error of 10%. Adolescent mothers who meet eligible criteria had to sign the informed consent before participation in the study. They were excluded if having tubal resection or peripartum hysterectomy. Self-administered questionnaires were validated, reliability tested and corrected before being used. Enrolled women completed the questionnaires by themselves after an explanation by the investigators. Information regarding demographic data, obstetric history, history of contraception use prior to the present pregnancy, and knowledge and opinions on EC were collected.

All data were analyzed by using statistical program, SPSS version 15.0. The general characteristics were summarized by descriptive statistics and expressed in terms of mean, standard deviation, and percentage. Chi-square test was used to test an association between EC awareness together with ever EC use and various demographic factors. Statistical significance was attained with a p-value of less than 0.05.

Results

A total of 104 adolescent mothers were recruited and all of the questionnaires were completed. The demographic characteristics of the women are shown in Table 1. The mean age was 17.5 years and their mean age at first sexual intercourse was 15.9 years. Most women were married and in their first pregnancy. Of all, 16.4% have still been students and only 6.8% studied in college or university. More than half of the women were unemployed or students and most of their families had monthly income less than 10,000 bahts.

Regard to their contraceptive uses, 87 mothers (83.7%) claimed that they ever used one or more contraceptive methods in the past. Oral contraceptive pills and condom were the common contraceptive method used (Table 2).

Eighty-eight adolescent mothers (84.6%) had known about EC, but only 30 women (28.8%) used them before. There was no statistical association between having awareness on EC and marital status, education level, occupation and their family income (Table 3). However, women who were single and unemployed or students were associated with more EC use. In mothers who had awareness on EC, the most cited method was “morning after pills” (73/88, 82.9%). Most of these women (68/73, 93.2%) correctly recognized that the pills should be used within 72 hours in order to be effective to prevent pregnancy. Among 104 participants, 82 cases (78.8%) emphasized that EC is suitable to prevent pregnancy and they will use EC in the future if necessary such as unprotected sexual intercourse.

Table 4 showed responses of adolescent

mothers to the question "Where did information regard to contraception be obtained?" About half of these mothers got the information from health care providers (pharmacy, hospital or health office, and private clinic). Only 20.2% of mothers acquired the data from mass media (television, radio, newspaper, and magazine) and 18.3% received from school via their friends or teachers.

Table 1. Demographic characteristics of adolescent mothers

Characteristics	N=104
Age (years, mean ± SD)	17.5 ± 1.47
Age at first sexual intercourse (years, mean ± SD)	15.9 ± 1.39
Number of pregnancy	
1	81 (77.8%)
2	16 (15.4%)
≥ 3	7 (6.8%)
Marital status	
Single	19 (18.3%)
Married	84 (80.7%)
Divorced	1 (1.0%)
Education	
None	1 (1.0%)
Primary school	23 (22.1%)
Secondary school	73 (70.1%)
College/University	7 (6.8%)
Occupation	
None	46 (44.2%)
Student	17 (16.4%)
Worker	37 (35.6%)
Others	4 (3.8%)
Family income (Bahts/month)	
< 5,000	22 (21.2%)
5,001 – 10,000	60 (57.7%)
10,001 – 20,000	20 (19.2%)
>20,000	2 (1.9%)

Table 2. Contraceptive methods ever used by adolescent mothers

Method	Cases	%
None	17	16.3
Oral contraceptive pills	61	58.7
Injectables	13	12.5
Implant	1	1.0
IUD	0	0
Condom	37	35.6

Table 3. Association between EC awareness, EC use and demographic characteristics

	EC awareness	**p-value**	**Ever used of EC**	**p-value**
Single	89.5% (17/19)	NS	47.4% (9/19)	.049
Married/Divorced	83.5% (71/85)		24.7% (21/85)	
≤ Primary school	83.3% (20/24)	NS	33.3% (8/24)	NS
≥ Secondary school	85.0% (68/80)		27.5% (22/80)	
No occupation/Student	82.5% (52/63)	NS	39.7% (25/63)	.002
Worker/Others	87.8% (36/41)		12.2% (5/41)	
Income ≤ 10,000	84.1% (69/82)	NS	30.5% (25/82)	NS
Income > 10,000	86.4% (19/22)		22.7% (5/22)	

Table 4. Sources of information regard to contraception

Source	**Cases**	**%**
Pharmacy	29	27.9
Hospital/Health office	20	19.2
Friend/Teacher	19	18.3
Television/Radio	16	15.4
Family member	11	10.6
Newspaper/Magazine	5	4.8
Private clinic	4	3.8

Discussion

The proportion of respondents who had awareness of EC varied among studies depended on the population studied. In a general practice based population, 78.6% of 878 women who completed the questionnaire had heard of EC.[10] The other population-based telephone survey found that adult women had more awareness of EC when compared with teenagers

(76.5% versus 67.6%, p < .001).[11] Time of study is also an important factor. A survey in American teenagers in 1996 reported a rate of awareness was only 33% of teenage girls.[12] However, other study showed increased awareness of EC in American teenagers from 44% in 1996 to 73% in 2002.[13] Interestingly, reports from United Kingdom showed high rate of EC awareness among adolescents. Ninety-eight percent of Scottish girls[14] and 81% of pregnant teenagers in England had heard of EC.[15] This high proportion of awareness in pregnant mothers was similar to result from the present study (84.6%).

Although there was high rate of awareness, the proportion of adolescent mothers who ever used EC was still low (28.8%). This low rate of EC use was similar to results from Scotland study (32.7%),[14] but higher than results from the US study (13%)[13] and English study (12%).[15] High rate use of regular contraceptive techniques (83.7%) might be the factor that lowers use of EC in this population. Nevertheless, the present study found that use of EC was associated with single marital status and unemployed or being students. Fear of unintended pregnancy in these groups may be the factor that increases use of EC.

A limitation of the present study was insufficient information, especially the nature of the pregnancy, i.e., whether or not it was intended. If the pregnancies in participants who have been students were assumed to be unintended, this means that there was a high rate of unintended pregnancy in spite of a high rate of their contraception use. Incorrect use of high user failure methods such as condom and oral contraceptive pill may explain this figure. To prevent future unintended pregnancies, these adolescents should be suggested to use contraceptive methods that have lower failure rate such as intrauterine devices or implants. However, if these participants still want to use condom or oral contraceptive pills for their contraception, they should be informed to use more appropriate and consistent methods.

Although the survey showed that adolescents in Bangkok had sex education mainly from school and pubic media,[4] major of the participants in present study received information regarding contraception from health care providers. Most common place where they access information and contraceptive services was pharmacy. The reasons for using pharmacy as the main source were being convenient and able to keep confidentiality from their parents.[16] To reduce number of adolescent pregnancies, health education should be directed towards teenagers who are at high risk of becoming sexually active at a young age. The present study suggests that contraceptive techniques including EC should be included in health education curriculum starting at primary school level.

In conclusion, most adolescent mothers in the present study had awareness of EC and intended to use EC in the future. EC use will be increased when potential users know where to obtain and when to use it. Health providers were important sources of information for these women. Health education in school should be strengthening especially provision of information regarding contraceptive techniques and EC.

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การรับรู้เกี่ยวกับการคุมกำเนิดฉุกเฉินในมารดาวัยรุ่น

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วัตถุประสงค์ *: เพื่อประเมินสัดส่วนของมารดาวัยรุ่นที่มีการรับรู้เกี่ยวกับการคุมกำเนิดฉุกเฉิน*

รูปแบบการศึกษา *: การศึกษาเชิงพรรณนาแบบตัดขวาง*

วัสดุและวิธีการ *: ทำการศึกษาในมารดาวัยรุ่นอายุน้อยกว่าหรือเท่ากับ 19 ปีที่มาฝากครรภ์หรืออยู่ ในหอผู้ป่วยหลังคลอดในโรงพยาบาลจุฬาลงกรณ์ตั้งแต่เดือนตุลาคม 2550 ถึงเดือนเมษายน 2551 โดยให้ผู้เข้าร่วมวิจัยตอบแบบสอบถามด้วยตนเอง แบบสอบถามประกอบด้วยข้อมูลพื้นฐาน ประวัติทางสูติศาสตร์และการคุมกำเนิด ความรู้และความคิดเห็นเกี่ยวกับการคุมกำเนิดฉุกเฉิน จากนั้นนำข้อมูลที่รวบรวมได้มาวิเคราะห์*

ผลการศึกษา *: มารดาวัยรุ่นรวม 104 รายที่เข้าร่วมการศึกษานี้มีอายุเฉลี่ย 17.5 ปี และมีเพศสัมพันธ์ครั้งแรกที่อายุเฉลี่ย 15.9 ปี วิธีการคุมกำเนิดที่เคยใช้มากที่สุดได้แก่ ยาเม็ดคุมกำเนิด (ร้อยละ 58.7) และถุงยางอนามัย (ร้อยละ 35.6) ผู้เข้าร่วมวิจัยส่วนใหญ่ (ร้อยละ 84.6) เคยรับรู้ว่าการคุมกำเนิดฉุกเฉินเป็นวิธีการคุมกำเนิดวิธีหนึ่งแต่มีเพียงร้อยละ 28.8 ที่เคยใช้การคุมกำเนิดฉุกเฉิน ร้านขายยา (ร้อยละ 27.9) และโรงพยาบาลหรือสถานบริการสาธารณสุข (ร้อยละ 19.2) เป็นแหล่งข้อมูลเกี่ยวกับวิธีการคุมกำเนิดในสตรีกลุ่มนี้ สตรี 82 ราย (ร้อยละ 78.8) คิดว่าการคุมกำเนิดฉุกเฉินเป็นทางเลือกหนึ่งของการป้องกันการตั้งครรภ์ที่ไม่ได้วางแผน และอาจใช้เป็นวิธีคุมกำเนิดในอนาคต*

สรุป *: มารดาวัยรุ่นส่วนใหญ่ มีการรับรู้เกี่ยวกับการคุมกำเนิดฉุกเฉินและตั้งใจจะใช้เป็นวิธีคุมกำเนิดในอนาคต บุคลากรทางสาธารณสุขยังคงเป็นแหล่งข้อมูลที่สำคัญในสตรีกลุ่มนี้*