Characteristics of Abortions in Southern Thailand

Sopen Chunuan, Siriratana Kosunvanna, Wattana Sripotchanart, Jitsai Lawantrakul, Jitti Lawantrakul, Uaiporn Pattrapakdikul, Jitranan Somporn

Abstract: The purposes of this descriptive study of 402 women from southern Thailand, who had undergone a recent abortion (spontaneous, therapeutic and unsafe), were to obtain data regarding their: pregnancy history; number of abortions and cost of abortion related treatments; abortion complications, impacts and related health care services; reasons for having an unsafe abortion; and, circumstances related to an unsafe abortion. Data were collected via use of a structured questionnaire and analyzed using descriptive statistics.

Even though 64.3% (n = 259) of the women had either a spontaneous (n = 238) or therapeutic (n = 21) abortion, 35.7% (n = 143) of them had undergone an unsafe abortion. They reported having an unsafe abortion due to: a social problem (not ready for a baby = 60.8%; being unmarried = 24.5%; or, being a student = 23.1%); a financial problem (insufficient income = 42.7%); a family problem (fear of family members being embarrassed = 16.8%; and/or, having enough children 6.1%). They complained, post-abortion, of having experienced: abdominal pain (n = 64; 44.8%); fever (n = 55; 38.5%); anemia (n = 25; 17.5%); and, shock (n = 10; 7.0%). Over one-third (n = 53; 37.1%) of them experienced psychological problems that did not include social or economic issues. Most (n = 115; 80.4%) of those who had an unsafe abortion reported making their own decisions regarding termination of the pregnancy, with 49% (n = 70) indicating they performed their own abortion.

Since the majority of women who had experienced an unsafe abortion were confronted with physical, psychological and economical problems, it behooves health care providers to offer counseling services and programs regarding the termination of an unwanted pregnancy. Such services and programs could help pregnant women make informed decisions regarding their health and quality of life.

Pacific Rim Int J Nurs Res 2012 ; 16(2) 97-112

Keywords: Abortion; Thai women; Pregnancy termination; Unsafe abortions

Background

A pregnant woman may terminate or end her pregnancy via natural birth or an abortion. There are three main types of abortion: spontaneous; therapeutic; and, unsafe. A spontaneous abortion (miscarriage) involves the spontaneous end of a pregnancy at the stage when the embryo or fetus is incapable of surviving independently which, generally, is prior to 20 weeks gestation.[1] A therapeutic abortion is termination of the

Correspondence to: Sopen Chunuan, *RN, PhD. Assistant Professor, Faculty of Nursing, Prince of Songkla University, Hatyai, Songkhla, Thailand. E-mail: skuns0@hotmail.com*
Siriratana Kosunvanna, *RN, MSN. Assistant Professor, Faculty of Nursing, Prince of Songkla University, Hatyai, Songkhla, Thailand.*
Wattana Sripotchanart, *RN, MED. Assistant Professor, Faculty of Nursing, Prince of Songkla University, Hatyai, Songkhla, Thailand.*
Jitsai Lawantrakul, *RN, MPH. Assistant Professor, Faculty of Nursing, Prince of Songkla University, Hatyai, Songkhla, Thailand.*
Jitti Lawantrakul, *MD. Obstetric-Gynecological Department, Hatyai Hospital, Hatyai, Songkhla, Thailand.*
Uaiporn Pattrapakdikul, *RN, MPH. Nursing Division, Songklanagarind Hospital, Hatyai, Songkhla, Thailand.*
Jitranan Somporn, *RN, MSN. Lecturer, Faculty of Nursing, Prince of Songkla University, Hatyai, Songkhla, Thailand.*

pregnancy by qualified health care providers as a result of maternal/fetal distress and/or rape.[2, 3, 4, 5] An unsafe abortion is termination of a pregnancy by a woman herself, in her home, or by untrained individuals, without medical supervision, in an illegal clinic setting.[6,7,8] In the case of an unsafe abortion, the health of the woman is in danger due to potential complications (i.e. uncontrolled bleeding and/or infection) and possible death.

Over 25% of unsafe abortions have been found to result in complications with permanent consequences, leading to 13% of the women involved in these abortions, in developing countries, dying. In addition, 50% of those who die are less than 25 years of age.[9] The World Health Organization has reported the number of unsafe abortions increased from 19.7 million, in 2003, to 21.6 million, in 2008.[6] Unsafe abortions continue to be a major public health problem throughout the world,[10] despite: the number of women, worldwide, who have undergone termination of a pregnancy, other than by childbirth, having decreased yearly (46 million, in 1995, to 42 million, in 2009);[6] abortions being recognized as a social stigma;[7] and, non-medically induced abortions often being considered illegal.

Southeast Asia continues to experience the highest rate of abortions (36 per 1,000 live births), with the lowest rates occurring in the western and south central regions (26 per 1,000 live births).[11] Although Thailand has restrictive laws concerning abortions, the estimated unsafe abortion rate is still high, with approximately 300,000-400,000 cases per year.[12] Research and statistics regarding the occurrence of unsafe abortions in southern Thailand is extremely limited. However, it has been reported that 29.4% of those who have undergone an abortion have experienced an unsafe abortion.[13]

The Thai Medical Council passed regulations and established criteria regarding abortions, in 2005, whereby termination of pregnancy is allowed if: the woman's life, physical well-being or mental health is in danger; there is fetal impairment; and/or, the pregnancy resulted from rape.[2, 14] These criteria, however, do not offer women increased access to legal processes if they desire to terminate a pregnancy for socio-economic reasons.[2]

Typically, women report having undergone an unsafe abortion due to family, social and economic issues; age; being a student; and/or, being unmarried.[15, 16] Prior research has revealed women report having undergone an abortion due to not: being ready to have children; wanting to change their lives; having sufficient financial resources; having a spouse; and, wanting others to know about the pregnancy.[17, 18] In addition, younger women have been found to have a higher rate of unsafe abortions compared to older women.[15]

Unsafe abortions are a major public health concern, worldwide, as they impact not only the lives of women, their families and the public-health systems, but also the economy.[19] Prior research has found adverse complications from an abortion occur most commonly among those who have undergone an unsafe vs. a spontaneous abortion.[15, 20] These include a variety of physical (hemorrhage, infection and injuries to the reproductive tract systems) and psychological complications (depression, guilt and anxiety).[21] In addition, an unsafe abortion may result in retained contraceptive products, excessive bleeding and pain, pelvic infections, acute renal failure, hypovolemic shock, septic shock, septicemia, uterine perforation and death.[15, 20]

Due to the restrictions imposed by Thailand's laws, regarding such data, and the social stigmatization that occurs to those who have such procedures, the true incidence of unsafe abortions is not known.[7] Unsafe abortions, from the researchers' clinical experience, have been noted to continue to be performed and women continue to fail to report the reason for having an abortion to avoid being stigmatized.

The stigmatization Thai women experience, after undergoing an abortion, appears to be derived from the religious, ethical and moral values held by the majority of Thais.[22] Thus, the purposes of this descriptive study of women from southern Thailand, who had undergone a recent abortion (spontaneous, therapeutic and unsafe), were to obtain data regarding: pregnancy history; number of abortions and cost of abortion related treatments; abortion complications, impacts and related health care services; reasons for having an unsafe abortion; and, circumstances related to an unsafe abortion.

Method

Study design: The study design was descriptive and involved the use of one researcher-developed questionnaire.

Ethical Considerations: Approval to conduct the study was granted by the Institutional Review Board of the primary investigator's academic institution, as well as the appropriate administrator of each hospital used as a study site. Subjects were told about: the objectives of the study; what study involvement would entail; confidentiality and anonymity issues; and, the freedom to withdraw, at anytime, without repercussions. Those who agreed to participate were asked to sign a consent form prior to data collection.

Sample and setting: A convenience sample of post-abortion women, who were patients, between April and June 2007, in one of six government hospitals (one university, two regional and three provincial) in southern Thailand, was obtained. The six hospitals, used as study sites, were selected based on the number of women treated who either had experienced either a spontaneous, therapeutic or unsafe abortion. Using Yamane's calculation technique,[23] with an alpha of 0.05 and based on 12,695 women having experienced an abortion in southern Thailand, in 2003,[24] a sample size of 388 was determined to be needed. However, to account for possible attrition, the number of subjects to be obtained was increased by 10%, for a sample size to 427. A total of 461 women were approached until 427 of them met the inclusion criteria and consented to participate in the study. Twenty-eight potential subjects, who had undergone an unsafe abortion, did not consent to take part in the study because of fear that other people would find out about their health situation. The six women who had undergone a spontaneous or therapeutic abortion gave no reason for not wanting to participate in the study. Of the 427 subjects who responded to the questionnaire, 25 failed to adequately complete all of the questionnaire items and, thus, were dropped from the study, making a final sample size of 402.

The inclusion criteria were Thai females, of any age, who: were able to speak, write and understand Thai; had experienced an abortion, regardless of chronological age, gestational age or type; and admitted to one of the study site hospitals. Potential subjects were obtained and identified via two nurses, in each of the six hospitals, who served as data collectors. All twelve nurse data collectors were trained, by the primary investigator (PI), regarding the inclusion criteria and data gathering process. In addition, they were in telephonic contact with the PI throughout the data gathering process.

The subjects' demographics, in both the unsafe abortion group (n = 143), and spontaneous (n = 238) and therapeutic (n = 21) abortion group, are shown in **Table 1.** Overall, subjects in the unsafe abortion category: had a mean age of 26.9 years; were primarily Buddhist, married or lived with a male; had a vocational/technical certificate; were not a student in an educational program; and were either employed or a housewife. Subjects in the spontaneous/therapeutic abortion category: had a mean age of 28.3 years; were primarily Buddhist; were married; and, had either a vocational/technical certificate or a college degree.

Table 1 Demographic Characteristics of Women Who Experienced an Abortion

Variables	Unsafe Abortion Group (n = 143)		Spontaneous or Therapeutic Abortion Group (n = 259)	
	n	%	n	%
Age (years)	M = 26.9 SD = 7.2		M = 28.3 SD = 6.9	
	Min. = 13.0 Max. = 46.8		Min. = 13.0 Max. = 42.3	
- 13-19	37.0	25.9	25.0	9.7
- 20-24	58.0	40.6	54.0	20.8
- 25-35	32.0	22.4	133.0	51.4
- Over 35	16.0	11.2	47.0	18.1
Religion				
- Buddhist	115.0	80.4	159.0	61.4
- Islam	28.0	19.6	99.0	38.2
- Christian	0.0	0.0	1.0	0.4
Marital status				
- Single	35.0	24.5	10.0	3.9
- Married	46.0	32.2	183.0	70.7
- Unmarried, but living together	47.0	32.9	59.0	22.8
- Separated	16.0	7.0	4.0	1.5
- Divorced	3.0	2.1	2.0	0.8
- Widowed	2.0	1.4	1.0	0.4
Highest educational level				
- No education	0.0	0.0	5.0	1.9
- Grade 4	10.0	7.0	11.0	4.2
- Grade 6	11.0	7.2	65.0	25.1
- Grade 7	1.0	0.7	4.0	1.5
- Grade 9	31.0	21.7	51.0	19.7
- Grade 12	25.0	17.5	40.0	15.4
- Vocational/technical certificate	48.0	33.6	44.0	17.0
- Bachelor's degree or Higher	17.0	11.9	38.0	14.7
Student in an educational program				
- No	100.0	69.9	239.0	92.3
- Yes	43.0	30.1	20.0	7.7
Occupation				
- None	4.0	2.8	0.0	0.0
- Student only	35.0	24.5	6.0	1.9
- Housewife	20.0	14.0	63.0	24.3
- Farmer/Fisherman	11.0	7.7	18.0	7.0
- Company employer	19.0	13.3	29.0	11.2
- Governmental employer	0.0	0.0	10.0	2.5
- Business owner	16.0	11.2	47.0	18.1
- Laborer	38.0	26.6	85.0	32.9
- Prostitute	2.0	1.4	0.0	0.0

Instrument: A structured, 24-item, self-report questionnaire *(Characteristics of Abortions in Southern Thailand),* developed by the PI, based upon a literature review and her clinical obstetrics' experience, was used for data collection. The 24-item questionnaire was divided into two parts: 1) demographics; and, 2) pregnancy and abortion. The demographic section (6 items) sought information regarding each subject's: chronological age; religion; marital status; highest educational level; presence as a student in an educational program; and, occupation. The pregnancy and abortion section of the questionnaire included 18 items related to each subject's pregnancy history (four items) and abortion (14 items). The pregnancy history component was designed to gain information, related to: gestational age at the time of abortion; circumstances leading to pregnancy; feelings regarding getting pregnant; and, decision made regarding the pregnancy. The information sought related to the abortion included: type of abortion; number of abortions; source of payment for hospital services; length of hospital stay; cost of hospital stay; complications as a result of the abortion; impact of the abortion (physiological, psychological, economic and social) experience; and health care services provided related to the abortion experience. Data related to the items regarding length and cost of hospital stay, complications as a result of the abortion and health care services related to the abortion experience were obtained, by the data collectors, from each subject's medical record at the time of discharge and recorded on the questionnaire. Only those who had an unsafe abortion were asked to respond to the last five questionnaire items: reason(s) for having an unsafe abortion (family problems, financial reasons, or social reasons); person who suggested having an unsafe abortion; person who conducted the unsafe abortion; location where the unsafe abortion was conducted; and method used to conduct the unsafe abortion. The medical diagnosis of each subject, after completion of the unsafe abortion, was obtained from the medical record and recorded on the questionnaire by the nurse data collectors. It took each subject approximately 30 to 55 minutes to complete the questionnaire.

Prior to use the questionnaire was judged, for logical content validity, by five experts who provided care for women who had experienced an abortion (two gynecological nurses, two nurse educators and one obstetrician). Five items required minor rewording to make them more understandable, and five items required additional possible responses. Once minor revisions were made, the questionnaire was administered to ten women (five who had a spontaneous or therapeutic abortion, and five who had an unsafe abortion) to assure the items were understandable. No additional changes were made in the questionnaire as a result of the pilot test.

Procedure: After approval to conduct the study was obtained, and potential subjects were identified as meeting the inclusion criteria and consented to take part in the study, the data collectors administered the questionnaire. Subjects were given 40 minutes of privacy, in their respective hospital rooms, to complete the questionnaire. The questionnaires then were retrieved by the data collectors and checked for completeness. As a thank-you gesture for their participation, subjects were given a small towel gift. At the end of each month, the data collectors sent the completed questionnaires to the PI, who also checked them for completeness. In addition, the PI called the data collectors, twice monthly, to check on their progress and find out how many subjects had been administered the questionnaire. Data collection took three months to complete.

Data analysis: All data were analyzed via descriptive statistics.

Results

Pregnancy history information: Details regarding the women's pregnancy history can be found in **Table 2.** Interestingly, the majority of women who experienced either an unsafe or spontaneous/therapeutic

Table 2 Pregnancy History

Variables	Unsafe Abortion Group (n = 143)		Spontaneous or Therapeutic Abortion Group (n = 259)	
	n	%	n	%
Gestational age at time of abortion (weeks)	M = 12.0 SD = 5.1 Min. = 4.0 Max. = 28.0		M = 12.8 SD = 5.8 Min. = 6.0 Max. = 27.0	
– 0 –12	92.0	65.2	149.0	58.2
– 12.01– 20.00	40.0	28.4	77.0	30.1
– More than 20	9.0	6.4	20.0	11.7
Circumstances related to the pregnancy				
– Planned pregnancy	5.0	3.5	146.0	56.4
– Having unplanned sexual intercourse	24.0	16.8	15.0	5.8
– Unplanned pregnancy	76.0	53.1	53.0	20.5
– Rape	0.0	0.0	1.0	0.4
– Partner disagreed to use birth control	6.0	4.2	8.0	3.1
– Incorrect use of contraceptive	23.0	16.1	18.0	6.9
– Failed use of contraceptive	8.0	5.6	13.0	5.0
– No use of a contraceptive	1.0	0.7	5.0	1.9
Feelings about pregnancy				
– Happiness	11.0	7.7	198.0	76.4
– Unhappy/sad	31.0	21.7	12.0	4.6
– Insomnia/stress	58.0	40.6	10.0	3.9
– Confusion	43.0	30.1	19.0	7.3
– Shock/anxiety	71.0	49.7	21.0	8.1
– Can't believe was pregnant	48.0	33.6	44.0	17.0
– Wanted to immediately terminate pregnancy	52.0	36.4	1.0	0.4
Decision regarding the pregnancy				
– Carry on pregnancy	3.0	2.1	253.0	97.7
– Terminate pregnancy	140.0	97.9	6.0	2.3

abortion were at a gestational age of 0 to 12 weeks. More than a half of those who experienced an unsafe abortion were expecting a baby as a result of an unplanned pregnancy. By comparison, the women who experienced a spontaneous/ therapeutic abortion had planned for their pregnancy. The primary feeling about being pregnant, among those who experienced an unsafe abortion was shock/anxiety and insomnia/ stress. The vast majority of these women wanted to terminate their pregnancies. By comparison, the primary feeling about being pregnant, among women who experienced a spontaneous/therapeutic abortion, was happiness. All but one of these women wanted to carry their pregnancies to completion.

Number of abortions and cost of related treatment issues: Details regarding the number of

abortions and cost-related treatment issues experienced by the women are shown in **Table 3.** For most of the women, in both the unsafe abortion group and the spontaneous/therapeutic abortion group, this was their first abortion. Universal health care coverage was the primary payment option for both groups. The mean length of the hospital stay, among the subjects in the unsafe abortion group, was slightly longer than the mean length of the hospital stay among those in the spontaneous/therapeutic abortion group. However, it was interesting to note subjects in the spontaneous/therapeutic abortion group had a wider range, in days, of hospital stay, compared to those in the unsafe abortion group. Not surprisingly, the cost of health care treatment was found to be slightly higher among subjects in the unsafe abortion group compared to those in the spontaneous/therapeutic abortion group.

Table 3 Number of Abortions and Cost of Related Treatments

Variables	Unsafe Abortion Group (n = 143)		Spontaneous or Therapeutic Abortion Group (n = 259)	
	n	%	n	%
Number of abortions				
- First	112.0	78.3	195.0	75.3
- Second	24.0	16.8	49.0	18.9
- Third	3.0	2.1	11.0	4.3
- Fourth	4.0	2.8	4.0	1.5
Payment of hospital services				
- Universal health coverage	95.0	66.4	178.0	68.7
- Civil servant medical benefit	2.0	1.4	13.0	5.0
- Health insurance	0.0	0.0	1.0	0.4
- Social security	15.0	10.5	54.0	20.8
- Medical support	2.0	1.4	0.0	0.0
- Car insurance	0.0	0.0	1.0	0.4
Length of hospital stay (days)	M = 3.1; SD = 1.6 Min. = 1-12		M = 2.9; SD = 2.0 Min-Max = 1- 27	
Cost of hospital services (baht)	M = 7,891.2; SD = 4,805.2 Min-Max = 930.0- 83,813.0		M = 7,165.9 SD = 4,593.4 Min-Max = 927.0 - 44,307.0	

Complications, impacts, and health care services related to the abortions: Details involving complications, impacts and health care services related to the abortions can be found in **Table 4.** Women who experienced an unsafe abortion more frequently were found to experience abdominal pain, fever, infection, anemia, and shock compared to subjects who experienced a spontaneous/therapeutic abortion. Women in both groups encountered physiological impacts as a result of their abortions. However, those in the spontaneous/therapeutic abortion group experienced more psychological impact compared to subjects in the unsafe abortion group. Compared to those in the spontaneous/therapeutic abortion group, women in the unsafe abortion group experienced more psychological/social impacts and psychological/economical/social impacts.

Table 4 Complications, Impacts and Health Care Services Related to Abortions

Variables	Unsafe Abortion Group (n = 143)		Spontaneous or Therapeutic Abortion Group (n = 259)	
	n	%	n	%
Complications (can have multiple responses)				
- Shock	10.0	7.0	8.0	3.1
- Vaginal tract injuries	2.0	1.4	0.0	0.0
- Anemia	25.0	17.5	37.0	14.3
- Abdominal pain	64.0	44.8	55.0	21.2
- Hysterectomy	1.0	0.7	1.0	0.4
- Endometriosis	12.0	8.4	2.0	0.8
- Pelvic inflammatory disease	3.0	2.1	0.0	0.0
- Infection	14.0	9.8	6.0	2.3
- Fever	55.0	38.5	19.0	7.3
Impact of abortion (can have multiple responses)				
- Physiological	143.0	100.0	259.0	100.0
- Psychological	53.0	37.1	150.0	57.9
- Economic	4.0	2.8	7.0	2.7
- Social	0.0	0.0	1.0	0.4
- Psychological and economic	22.0	15.4	37.0	14.7
- Psychological and social	18.0	12.6	2.0	0.8
- Psychological, economic and social	14.0	9.8	3.0	1.2
Health care services provided related to the abortion (can have multiple responses)				
- Dilatation & curettage	91.0	63.6	175.0	67.6
- Antibiotics	93.0	65.0	121.0	46.7
- Blood	14.0	9.8	24.0	9.3
- Surgery	5.0	3.5	1.0	0.4
- Syntocinon	16.0	11.2	54.0	20.8
- Methergin	18.0	12.6	49.0	18.9
- Naradole	1.0	0.7	5.0	1.9
- Other	24.0	16.8	35.0	13.5

Multiple health care services were provided to subjects in both groups, with dilatation and curettage being the most frequently used treatment. Compared to women in the spontaneous/therapeutic abortion group, those in the unsafe abortion group encountered greater use of antibiotics and surgery. On the other hand, subjects in the spontaneous/ therapeutic abortion group encountered greater use of medications (Syntocinon, Methergin and Naradole) to control vaginal bleeding.

Reasons for having an unsafe abortion: Details regarding the reasons for having an unsafe abortion are reported in **Table 5.** The major reasons were found to be: family, financial and social. The most frequently stated family reasons were: "fear of family members' embarrassment about the pregnancy"; and, "already have enough children." The most frequently stated financial reasons for having an unsafe abortion were: "insufficient income;" and, "have debt." "Not ready for a baby," being unmarried," and "being a student in an educational program" were the most frequently stated social reasons for undergoing an unsafe abortion.

Circumstances related to an unsafe abortion: Information regarding circumstances related to an unsafe abortion is shown in **Table 6.** The vast majority of the subjects who had an unsafe abortion made their

Table 5 Reasons for Having an Unsafe Abortion (n = 143)

Reasons	Women involved	
	n	%
Family problems		
- Husband has previous wife	6.0	4.2
- Separated from husband	10.0	7.0
- Husband has another wife	5.0	3.5
- Husband has serious illness	1.0	0.7
- Fear of family members' embarrassment about the pregnancy	24.0	16.8
- Parents forced abortion or did not accept the pregnancy	12.0	8.4
- Already have enough children	23.0	16.1
- Husband in jail for a serious crime	2.0	1.4
- Separated from partner before knowing about pregnancy	3.0	2.1
Financial reasons		
- Insufficient income	61.0	42.7
- Have debt	17.0	11.9
- No income	4.0	2.8
- Pregnancy interferes with job/career	14.0	9.8
Social reasons		
- Not ready for a baby	87.0	60.8
- Unmarried	35.0	24.5
- Embarrassment to friends	20.0	14.0
- Student in an educational program	33.0	23.1
- Too young	20.0	14.0
- Too old	5.0	3.5
- Boyfriend/partner did not accept the pregnancy	11.0	7.7

Table 6 Circumstances Related to an Unsafe Abortion (n = 143)

Reasons	Women involved	
	n	%
Person who suggested having an unsafe abortion		
– Self	115.0	80.4
– Boyfriend/lover	21.0	14.7
– Husband	13.0	9.1
– Friend	52.0	36.4
– Father	2.0	1.4
– Mother	4.0	2.8
– Sister	11.0	7.7
– Brother	1.0	0.7
– Heath personnel	1.0	0.7
Person who conducted the unsafe abortion		
– Self-induced	70.0	49.0
– Doctor	6.0	4.2
– Unqualified practitioners	31.0	21.7
– Community health nurse	8.0	5.6
– Boyfriend/lover	10.0	7.0
– Husband	8.0	5.6
– Friend	4.0	2.8
– Unknown	8.0	5.6
Location where unsafe abortion was conducted		
– No answer	3.0	2.1
– Clinic	12.0	8.4
– Hospital	1.0	0.7
– Personal house/dormitory room	84.0	58.7
– Friend's house	7.0	4.9
– Illegal abortion clinic	31.0	21.7
– Drug store	1.0	0.7
– Hotel	2.0	1.4
– Other	2.0	1.4
Method used to conduct unsafe abortion		
– Oral pills	63.0	44.1
– Intend to have accident	4.0	2.8
– Injection	14.0	9.8
– Vaginal pills	70.0	49.0
– Intrauterine normal saline injection	5.0	3.5
– Insertion of equipment into uterus	27.0	18.9
– Dilation & curettage	3.0	2.1
– Massage the abdomen	10.0	7.0
– Compression on abdomen with feet	2.0	1.4
Medical diagnosis after completion of unsafe abortion		
– Incomplete abortion	43.0	30.1
– Completed abortion	9.0	6.3
– Septic abortion	12.0	8.4
– Criminal abortion	79.0	55.2

own decisions to do so. Only 36.4% of them obtained advice from friends and 14.7% obtained advice from boyfriends/lovers regarding whether to obtain an unsafe abortion. The person most frequently involved in conducting an unsafe abortion was the woman herself, followed by an unqualified practitioner. The most frequent location where the unsafe abortion occurred was the subject's house or dormitory room. When the unsafe abortion was carried out by an unqualified practitioner, the most frequent location for the abortion was an illegal abortion clinic. The method most frequently used to carry out the unsafe abortion was vaginal pills, followed by oral pills. Finally, the medical diagnosis listed, after completion of an unsafe abortion, was criminal abortion followed by incomplete abortion.

Discussion

The age range of subjects, in this study, was found to be somewhat similar to the age range of Thai women in a prior study that addressed abortions. Warakamin and colleagues[15] found: women 15 to 19 years of age accounted for about 19% of all abortions, while 20 to 24 year olds accounted for 33% and those 30 years of age and older accounted for 25% of all abortions. Similar to prior research that noted unsafe abortions (illegal), primarily, involved women younger than 25 years of age,[25] this study found 66.5% of those who experienced an unsafe abortion were less than 25 years of age. An analysis of data on unsafe abortions indicated two-thirds of abortions occurred among 15 to 30 year olds, with almost 14% of the abortions occurring among women less than 20 years of age.[26,27] However, young adults reportedly experience higher rates of induced abortions than teenagers or youth.[28]

As in many other countries, sexual risk behavior of Thai teenagers has increased and they are engaging in sexual intercourse at an earlier age. Although premarital sexual intercourse is not acceptable by traditional Thai norms, 23% of male and 15% of female high school students have reported engaging in premarital sex.[29] A study of Thai vocational students found the occurrence of their first coitus to be, on average, at age 17.6 years, with 48% of male students and 43% of female students reporting not using contraceptives.[30] This behavior may be why more young Thais are obtaining unsafe abortions.

This study revealed subjects who had experienced an unsafe abortion had a higher rate of unplanned pregnancy (53.1%), than those with a spontaneous/therapeutic abortion (20.5%). These findings suggest the women who had unsafe abortions did not plan to have a baby and, thus, did not want to carry the fetus to term. Similar to prior research, these results show those who had an unsafe abortion had an unplanned[15] or unwanted pregnancy.[8] In Thai society, unplanned pregnancies often are the result of ineffective sex education and/or lack of effective birth control services.[31] To effectively respond to the issues of birth control and family planning, relevant health care services need to be extended to all who need them. This does not mean only those who are married and of reproductive age should be provided necessary health care services, but all teenagers (boys and girls) single men, and single women need to be included.

Congruent with prior research, this study revealed the gestational age of the fetuses, in both the unsafe abortion group and the spontaneous/therapeutic abortion group, were similar (0 to 12 weeks), which indicated their abortions occurred during their first trimester, a much safer time than during the second or third trimester.[20,32] A previous study also found most unsafe abortions (57%) occurred at 9 to 15 weeks of gestation, with 16.8% of them taking place at 20 to 28 weeks of gestation.[15]

Those who experienced an unsafe abortion stated they preferred to terminate their pregnancy as soon as possible. No doubt this was because they did not want others to know about their pregnancies. Since Thai women are expected to preserve their virginity

and display sexual correctness,[33] women who get pregnant before marriage tend to be morally condemned. Furthermore, premarital and extramarital sex are frowned upon in the Thai culture and there is little sympathy for those who become pregnant out of wedlock, especially since it is believed women, but not men, can control their sexual desires.[34] Thus, having an abortion often is associated with the woman having a lack of morals and virtue. The majority of subjects in this study made their own decisions to terminate their pregnancies, with almost half of them performing their own, self-induced, unsafe abortions.

In addition, similar to a prior study conducted in Khon Kaen,[35] the findings found the estimated rate of unsafe abortions to be 35.6% (n = 143). However, this estimated rate is higher than the rate (28.5%) found in a Thai study in 1999.[20] On the other hand, unlike a previous study wherein more than half of the abortions were considered unsafe,[35] 35.6% of the subjects in this study experienced an unsafe abortion. Although Thailand has very strict laws prohibiting self and non-medically induced abortions, the incidence rate of such abortions does not appear to be declining. A 2005-2006 retrospective study found 56.95% of patients receiving care, after an abortion in a Thai public hospital, had experienced a self-induced or non-medically approved (unsafe) abortion.[32] Although some efforts at reforming the restrictive abortion laws has taken place, the laws remain basically unchanged. As a result, because of feeling trapped and desperate, many women continue to suffer and die from unsafe clandestine abortion services.[12]

The length of hospital stay, in this study, for those who had experienced an unsafe abortion (1 to 12 days; average = 3.1 days) was similar to Srinil's[20] findings, which showed a range of 1 to 19 days (average stay =2.2 days). Regarding cost, the results revealed subjects in the unsafe abortion group had slightly higher hospital costs than those in the spontaneous/therapeutic abortion group. This finding was not surprising given that, compared to spontaneous/ therapeutic abortions, unsafe abortions often are followed by medical complications.[20]

Consistent with a prior study that noted the most common serious complications following an unsafe abortion were hemorrhage and septicemia,[15] the most frequent complications found among subjects, in this study, were abdominal pain, fever, anemia and infection. In addition, a nationwide survey, regarding self or non-medically induced abortions, found post-abortion complications among Thais were: severe hemorrhage (11.8%); septicemia (12.4%); pelvic inflammatory disease (12.0%); and, uterine perforation (7.4%).[15]

Not surprisingly, subjects in both the unsafe abortion group and spontaneous/ therapeutic abortion group experienced a multitude of impacts (physiological, psychological, economic and social). Congruent with prior research, women in both groups were noted to have encountered major physiological impacts to their bodies secondary to their abortions.[36] Although both groups had to contend with the psychological impact of their experiences, the psychological impact of the abortion appeared to be more prevalent (57.9%) among subjects who had a spontaneous/therapeutic abortion than among those who had an unsafe abortion. It was not surprising the spontaneous/therapeutic abortion group, compared to the unsafe abortion group, encountered a great deal of psychological impact because those in the spontaneous/ therapeutic abortion group did not want their pregnancies terminated. However, those in the unsafe abortion group, compared to the women in the spontaneous/therapeutic abortion group, appeared to more likely encounter a multitude of combined impacts (psychological, social and economic). Regardless, health care providers need to realize the impacts of unsafe abortions are not limited solely to the lives of the affected women. Rather, family members and the public health care system also are affected by unsafe abortions.[19]

Consistent with previous studies, the majority of subjects in both the spontaneous/ therapeutic abortion group and the unsafe abortion group received dilatation

and curettage (67.6% vs. 63.6%, respectively) due to having retained contraceptive products.[20, 32] The women, in this study, who had experienced an unsafe abortion more often were treated with antibiotics and encountered more severe complications than those who had experienced a spontaneous/therapeutic abortion. Most likely this was because unsafe abortions tend to be conducted with unsterile equipment, performed by untrained practitioners or carried out by women themselves.

Congruent with data from developing and developed countries, family problems, financial issues and social reasons were the major categories regarding why the subjects engaged in an unsafe abortion.[18] In addition, prior studies have found women seek abortions because of: educational (i.e. being a student) and economic (i.e. being unmarried) issues;[37, 38] social problems (i.e. fear about public's perception);[39] and relationship/family concerns (i.e. reluctance of male partner to have a child at the present time,[35] believe a large family is an unnecessary burden that interferes with the immediate problem of raising and educating current children,[34, 35] and concern about stability of the relationship with the partner[40]). In this study, the reasons most frequently cited were: not being ready for a baby (60.8%); insufficient income (42.7%); being unmarried (24.5%); and, being a student (23.1%). Not surprisingly, a higher proportion of younger women, compared to older women, identified socio-economic problems as reasons for an abortion. Most likely this was because younger women do not have the same social or economic resources available to older women.

Limitations and Recommendations

Like all studies, this study has limitations that need to be taken into consideration when examining the findings. First, the study was carried out only in the southern region of Thailand. Thus, the findings may not be applicable to women in other regional areas of the country. Future studies on abortion characteristics need to be conducted in multiple sites within all regions of Thailand. Second, the study was descriptive in nature and, thus, provided no prescriptive information. Future studies need to consider focusing on health care interventions that could decrease the number and complications of unsafe abortions (i.e. sex education programs for men and women of childbearing age, more accessibility to health care providers who conduct safe abortions, psychological counseling for women with unwanted pregnancies, access to birth control measures, and quality post-abortion care). Given the current Thai laws limit a woman's access to a safe abortion, it is recommended these laws be re-examined.

Acknowledgements

A special thank you is extended to the National Research Council of Thailand for fully funding this research.

References

1. Oats J, Abraham S, editors. Llewellyn-Jones fundamentals of obstetrics and gynaecology. 9th ed. Edinburgh, England: Mosby Elsevier; 2010.
2. Thai Medical Council. Regulation on criteria for performing therapeutic termination of pregnancy in accordance with Section 305 of the Criminal Code of Thailand B.E. 2548 [Internet] [cited 2011 April 1]. Available from: http://reproductiverights.org/en/node/2721/mappopup#thai.
3. Guttmacher Institute. Facts on induced abortion worldwide [Internet]. 2011 Feb [cited 2011 Apr 1]. Available from: http://www.guttmacher.org/pubs/fb_IAW.pdf.
4. Schorge JO, Schaffer JI, Halvorson LM, Hoffman BL, Bradshaw KD, Cunningham FG, editors. Williams gynecology. New York (NY): McGraw Hill Medical; 2008.
5. Katz VL, Lentz GM, Lobo RA, Gershenson DM, editors. Comprehensive gynecology. 5th ed. Philadelphia (PA): Mosby Elsevier; 2007.

6. World health Organization. Unsafe abortion: Global and regional estimates of the incidence of unsafe abortion and associated mortality in 2008. 6th ed. [Internet]. [cited 2011 Jan 10]. Available from: http://www.who.int/reproductivehealth/publications/unsafe_abortion/9789241501118/en/.
7. Haddd LB, Nour NM. Unsafe abortion: Unnecessary maternal mortality [Internet]. 2009 [cited 2011 Apr 1]; 2(2):122-26. Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2709326/pdf/RIOG002002_0122.pdf.
8. Bankole A, Singh S, Haas T. Reasons why women have induced abortion: Evidence from 27 countries. Int Fam Plan Perspect. 1998; 24:117-27.
9. World Health Organization. Unsafe abortion global and regional estimates of the incidence of unsafe abortion and associated mortality in 2003. 5th ed. Paris, France: World Health Organization; 2007.
10. Kumar A, Hessini L, Ellen MH. Conceptualizing abortion stigma. Culture, Health & Sexuality; 2009: http://www.infomaworld.com. DOI:10.1080/139691050902842741.
11. Guttmacher Institute. Facts on abortion in Asia [Internet]. 2012 Jan [cited 2012 Jan 20]. Available from: http://www.guttmacher.org/pubs/IB_AWW-Asia.pdf.
12. Intaraprasert S, Boonthai N. Challenge for unsafe abortion. J Med Assoc Thai. 2005; 88 Suppl. 2:S104-7.
13. Sutheerasak N. Patients with past abortions attending treatment at Rattapum Hospital. Songkla Med J. 2004; 22(4): 249-54.
14. Singh S, Wulf D, Hussain R, Bankole, A, Sedgh G. Abortion Worldwide: A decade of uneven progress [Internet]. 2009 [cited 2011 Apr 1]. Available from: http://www. guttmacher.org/pubs/Abortion-Worldwide.pdf.
15. Warakamin S, Boonthai N, Tangcharoensathien V. Induced abortion in Thailand: Current situation in public hospitals and legal perspectives. Reprod Health Matters. 2004; 12(24): 147-56.
16. Shivo S, Bajos N, Ducot B, Kaminski W. Women's life cycle and abortion decision in unintended pregnancy. J Epidemiol Community Health. 2003; 5:601-5.
17. Faria G, Barrett E, Goodman LM, Women and abortion: Attitudes, social networks, decision-making. Soc Work Health Care. 1985; 11(1): 85-99.
18. Lawrence B, Frohwirth LF, Lindsay F, Dauphinee A, Singh S, Moore AM. Reasons U.S. women have abortions: Quantitative and qualitative perspectives. Perspect Sex Reprod Health. 2005; 37(3): 110-8.
19. Singh S. Hospital admissions resulting from unsafe abortion: Estimates from 13 developing countries [Internet]. 2006 Nov25 [cited 2011 Apr 1]; 368:1887-92. Available from: http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(06) 69778-X/ fulltext /DOI: 10.1016/S0140-6736(06)69778-X.
20. Srinil S. Factors associated with severe complications in unsafe abortion. J Med Assoc Thai. 2011; 94: 408-14.
21. Niinimaki M, Suhonen S, Mentula M, Hemminki E, Heikinheimo O, Gissler M. Comparison of rates of adverse events in adolescent and adult women undergoing medical abortion: Population register based study [Internet]. 2011 Apr 20 [cited 2011 Apr 22]; 342:1-7. Available from: http://www.bmj.com/highwire/filestream/358664/field_ highwire_article_pdf/0.pdf / DOI: 10.1136/bmj.d2111.
22. Chaturachinda K, Boonthai N. Unsafe abortion: A major cause of maternal mortality in Thailand. [Internet]. [cited 2011 Jan 10]. Available from: http://www.womenhealth.or.th/downloads/focus-project/advocacy.pdf.
23. Yamane T. Statistics: An introductory analysis. 2nd ed. New York (NY): Harper and Row; 1967.
24. Bureau of Policy and Strategy. Thailand investing in health report. [cited 2007 Dec 10]. Available from: http://203.157.19.191/input_bps.html.
25. United Nations Economic and Social Commission for Asia and the Pacific. Youth in Thailand: A review of the youth situation and national policies and programmes. New York (NY): United Nations; 2000.
26. Shah IH, Ahman E. Age patterns of unsafe abortion in developing country regions. Reprod Health Matters. 2004; 12(24): 9-17.
27. World Health Organization. Health situation in South-East Asia. WHO: South East Asia Region; 2004.
28. Thapa PJ, Thapa S, Shrestha N. A hospital-based study of abortion in Nepal. Stud Fam Plann. 1992; 23: 311-18.
29. Sangkarat O. The knowledge of, attitude toward, and practice on sex behavior and birth control of secondary school students in Suphanburi province [thesis]. Bangkok, Thailand: Mahidol Univ.; 1997.

30. Allen DR, Carey JW, Manopaiboon C, Jenkins RA, Uthaivaravit W, Kilmarx PH, et al. Sexual health risks among young Thai women: Implications for HIV/STD prevention and contraception [Internet]. 2003 Mar 1 [cited 2011 Apr 1]; 7(1): 9-21. Available from: http://www.springerlink.com/content/nr23427k386m2721/fulltext.pdf /DOI:10.1023/A:1022553121782.
31. Institute for Population and Social Research (IPSR). Thai health 2006 [Internet]. 2006 [cited 2011 Oct 1]. Available from: http://www.hiso.or.th/hiso/HealthReport/ report 2006-ENG.php?manu=1.
32. Prohm S. Abortion in Ramathibodi hospital [thesis]. Bangkok, Thailand: Mahidol Univ.; 2009.
33. Sirirassamee B, Sethabut C, Yoddumnem Attig B. Gender perspective in reproductive health practices in Thailand: A synthesis of research findings. Nakornpathom, Thailand: Institute for Population and Social Research, Mahidol Univ.; 2003.
34. Lerdmaleewong M, Francis C. Abortion in Thailand: A Feminist Perspective. [Internet]. [cited 2011 Jan 1]. Available from: http://www.buddihistethics.org/5/aborti1.html.
35. Srinil S. Complications after the unsafe abortion. Khon Kaen Medical J. 2009; 33(2): 59-63.
36. Söderberga H, Janzonb L, Sjöberg NO. Emotional distress following induced abortion: A study of its incidence and determinants among abortees in Malmö, Sweden. Eur J Obstet Gynecol Reprod Biol. 1998; 79(2): 173-8.
37. Broen AN, Moum T, Bödtker AS, Ekeberg Ö. Reasons for induced abortion and their relation to women's emotional distress: A Prospective, two-year follow-up study. Gen Hosp Psychiatry. 2005; 20: 36-43.
38. Finer LB, Frohwirth LF, Dauphinee LA, Singh S, Moore AM. Reasons U.S. women have abortions: Quantitative and qualitative perspectives [Internet]. 2005 Sep [cited 2011 Apr 1]; 37:110-118. Available from: http://www.guttmacher.org/pubs/journals/3711005.pdf.
39. Senbeto E, Alene GD, Abesno N, Yenench H. Prevalence and associated risk factors of induced abortion in northwest Ethiopia. Ethiop J Health Dev 2005; 19(1):37-44.
40. Torres A, Forrest JD. Why do women have abortions? Fam Plann Perspect. 1988; 20(4): 169-76.

ลักษณะของการแท้งในภาคใต้ของประเทศไทย

โสเพ็ญ ชูนวล, ศิริรัตน์ โกศัลวัฒน์, วัฒนา ศรีพจนารถ, จิตใส ลาวัลย์ตระกูล, จิตติ ลาวัลย์ตะกูล, อวยพร ภัทรภักดีกุล, จิตรานันท์ สมพร

บทคัดย่อ: การศึกษาเชิงบรรยายครั้งนี้มีวัตถุประสงค์เพื่อรวบรวมข้อมูลของสตรีหลังแท้งซึ่งเป็นแท้งเอง การทำแท้งเพื่อการรักษา หรือการทำแท้งที่ไม่ปลอดภัย จำนวน 402 ราย ในภาคใต้ของประเทศไทย โดยศึกษาเกี่ยวกับประวัติการตั้งครรภ์ อุบัติการณ์ของการแท้งและค่ารักษาพยาบาล ผลกระทบที่เกิดจากการแท้งและการรักษาที่ได้รับ; เหตุผลที่ทำให้สตรีเลือกทำแท้งไม่ปลอดภัย; และรายละเอียดที่เกี่ยวข้องกับการทำแท้งไม่ปลอดภัย เก็บข้อมูลโดยใช้แบบสอบถามที่มีลักษณะเป็นโครงสร้าง สถิติที่ใช้ในการวิเคราะห์ข้อมูลเป็นสถิติเชิงบรรยาย

แม้ว่ากลุ่มตัวอย่างร้อยละ 64.3 (n = 259) เป็นสตรีที่แท้งเอง (n = 238) หรือทำแท้งเพื่อการรักษา (n = 21) และร้อยละ 35.7 (n = 143) ของกลุ่มตัวอย่างทั้งหมดเป็นสตรีที่ทำแท้งไม่ปลอดภัย สตรีหลังแท้งให้เหตุผลของการทำแท้งไม่ปลอดภัยว่าเกิดจากปัญหาทางด้านสังคม (ไม่พร้อมจะมีบุตรร้อยละ 60.8, ตั้งครรภ์ก่อนสมรสร้อยละ 24.5, และกำลังศึกษาร้อยละ 23.1) ปัญหาทางด้านเศรษฐกิจ (มีรายได้ไม่เพียงพอร้อยละ 42.7) และ/หรือปัญหาทางด้านครอบครัว (กลัวครอบครัวอับอายร้อยละ 16.8 หรือมีบุตรเพียงพอแล้วร้อยละ 16.1) กลุ่มตัวอย่างรายงานว่ามีอาการปวดท้องรุนแรง (n = 64; ร้อยละ 44.8) มีไข้ (n = 55; ร้อยละ 38.5) มีภาวะซีด (n = 25; ร้อยละ 17.5) และมีภาวะช็อกร้อยละ 7.0 (n = 10) สตรีหลังแท้งมากกว่าหนึ่งในสาม (n = 53; ร้อยละ 37.1) มีผลกระทบด้านจิตใจเพียงอย่างเดียวคือไม่มีปัญหาทางด้านสังคมและเศรษฐกิจร่วมด้วย สตรีส่วนใหญ่ที่ทำแท้งไม่ปลอดภัยตัดสินใจ ยุติการตั้งครรภ์ด้วยตนเอง (n = 115; ร้อยละ 80.4) และสตรีหลังทำแท้งไม่ปลอดภัยร้อยละ 49 (n = 70) ทำแท้งด้วยตนเอง

จากการศึกษาครั้งนี้พบว่าสตรีหลังทำแท้งไม่ปลอดภัยส่วนใหญ่ประสบกับปัญหาทั้งทางด้านร่างกาย จิตใจ และเศรษฐกิจ ผลการศึกษาครั้งนี้จะเป็นข้อมูลพื้นฐานสำหรับเจ้าหน้าที่สาธารณสุขในการจัดบริการให้คำปรึกษาและโปรแกรมการดูแลที่เกี่ยวข้องกับการยุติการตั้งครรภ์จากการตั้งครรภ์ที่ไม่พึงประสงค์ ซึ่งโปรแกรมหรือบริการที่พัฒนาขึ้นนี้จะเป็นประโยชน์สำหรับสตรีตั้งครรภ์ได้ใช้ประกอบในการตัดสินใจเกี่ยวกับการดูแลสุขภาพ และพัฒนาคุณภาพชีวิตของตนเอง

Pacific Rim Int J Nurs Res 2012 ; 16(2) 97-112

คำสำคัญ: แท้ง; สตรีไทย; การยุติการตั้งครรภ์; การแท้งไม่ปลอดภัย

ติดต่อที่: โสเพ็ญ ชูนวล, *RN, PhD. ผู้ช่วยศาสตราจารย์ ภาควิชาการพยาบาลสูติ-นรีเวชและยุตุงครรภ์ คณะพยาบาลศาตร์ มหาวิทยาลัยสงขลานครินทร์ อำเภอหาดใหญ่ จังหวัดสงขลา ประเทศไทย E-mail: skuns0@hotmail.com*

ศิริรัตน์ โกศัลวัฒน์, *RN, MSN. ผู้ช่วยศาสตราจารย์ ส ภาควิชาบริหารการศึกษาพยาบาลและบริการการพยาบาล คณะพยาบาลศาตร์ มหาวิทยาลัยสงขลานครินทร์ อำเภอหาดใหญ่ จังหวัดสงขลา ประเทศไทย*

วัฒนา ศรีพจนารถ, *RN, MED. ผู้ช่วยศาสตราจารย์ ภาควิชาการพยาบาลสูติ-นรีเวชและยุตุงครรภ์ คณะพยาบาลศาตร์ มหาวิทยาลัยสงขลานครินทร์ อำเภอหาดใหญ่ จังหวัดสงขลา ประเทศไทย*

จิตใส ลาวัลย์ตระกูล, *RN, MPH. ผู้ช่วยศาสตราจารย์ ภาควิชาการพยาบาลสูติ-นรีเวชและยุตุงครรภ์ คณะพยาบาลศาตร์ มหาวิทยาลัยสงขลานครินทร์ อำเภอหาดใหญ่ จังหวัดสงขลา ประเทศไทย*

จิตติ ลาวัลย์ตะกูล, *MD. กลุ่มงานสูติ-นรีเวชกรรม โรงพยาบาลหาดใหญ่ อำเภอหาดใหญ่ จังหวัดสงขลา ประเทศไทย*

อวยพร ภัทรภักดีกุล, *RN, MPH. ผู้ตรวจการพยาบาล ป่ายการพยาบาล โรงพยาบาลสงขลานครินทร์ อำเภอหาดใหญ่ จังหวัดสงขลา ประเทศไทย*

จิตรานันท์ สมพร, *RN, MSN. อาจารย์ ภาควิชาการพยาบาลสูติ-นรีเวชและยุตุงครรภ์ คณะพยาบาลศาตร์ มหาวิทยาลัยสงขลานครินทร์ อำเภอหาดใหญ่ จังหวัดสงขลา ประเทศไทย*