

**A study on abortion in South Okkalapa**

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As maternal morbidity and mortality following induced abortions are still high in hospital-based-studies in Myanmar (Win Win Mya; 2000 and Krsasu; 1992) <sup>4,5</sup>, the knowledge, attitude and practice concerning abortion should be explored among the community. The general objective of this study is to identify the problem of abortion in South Okkalapa Township in the Yangon City. This study is a cross-sectional community-based descriptive study using both quantitative and qualitative data collection techniques. The study population comprised 572 currently married women aged 15 to 49 years residing in South Okkalapa Township. The eligible women were recruited during household surveys during May to October 2002. The project medical officer and interviewers were trained for data collection and face-to-face interviews. More than three quarters (77.7 %) of the study sample were aged 30 years and above, one third (35.8%) were educated up to the middle school level and more than seventy percent (73.4) were dependent housewives. The majority were Buddhists (93.5%). More than half (55.4%) of the husbands of the respondents were high school or university graduates and nearly half (48.8%) of them were either small or large scale business owners. Income was between 10,001 to 50,000 Kyats per month for nearly two thirds of the families. Eighty percent belonged to the parity one to three group. A history of abortion was given by 125 (21.9%), of whom 28 (4.8%) were repeat aborters. Only 19 women (3.3%) admitted having induced abortion. When specific abortion rates were analyzed, an increasing trend was observed by age of respondent and duration of marriage. When odds ratios were estimated for the selected variables, the older age group (30 year and above) and the longer the duration of marriage (10 years and above) were found to have high risk of abortion.

**INTRODUCTION**

Worldwide, 180 to 200 million pregnancies occurred each year. Among them, 75 million pregnancies were unintended and more than a half million pregnant women died each year and more than twenty million

had reproductive morbidity following pregnancy. Of among these 75 million unintended pregnant women, 50 million underwent induced abortion and twenty million had unsafe abortion [1].

Maternal mortality ratio for Myanmar in 1999

was estimated at 2.55 per thousand live births and urban – rural difference is apparent; 1.78 for urban and 2.81 for rural respectively [2]. The maternal mortality is quoted as 1 and 1.23 per 1000 live births for the year 1994-1995 in urban and rural areas [3].

Abortion is one of the leading causes of the high rates of maternal mortality in Myanmar. The causes of maternal mortality according to a 18 hospital study in Myanmar in 1989-90 had revealed that abortion contributes 38.34% [4]. Abortion still contributes significantly to maternal mortality in North Okkalapa General Hospital, during 1992 to 1998 (a seven year period study), septic abortion comprises 54.17% of direct obstetric deaths [5].

Abortion causes not only maternal mortality but also morbidity and this was shown in reproductive morbidity survey conducted in rural and urban Pyay and Kalaw in 1999 [6].

There has been only one community-based epidemiological study of abortion in Myanmar. In this study of 943 currently married women residing in North Okkalapa, 58% reported at least one abortion, of which 20% were reported to have been induced [7].

Determinants or factors that explain why women resort to abortion and identification of the high risk patients who chooses abortion despite its illegality and the risks of mortality and morbidity have emerged as important issues in reproductive health [8].

Although many unintended pregnancies are carried to term, subgroups of women with the greatest occurrence of unintended pregnancy that choose to abort can be identified. These women may form a target group who is in need of improved reproductive health services.

Thus a community-based study on abortion in a peri-urban area like South Okkalapa is both timely and essential.

### *General objective*

The general objective is to identify the problem of abortion in South Okkalapa Township, Yangon Division, Myanmar.

### *Specific objectives*

1. To identify the selected socio-demographic and reproductive characteristics of women who have abortion.
2. To find out the types and number of abortion in the study population.
3. To identify the risk factors for abortion.
4. To determine the sequelae of induced abortion.

## **MATERIALS AND METHODS**

### *Study design*

It is a community based cross-sectional descriptive study. It was conducted by trained interviewers with questionnaire method.

### *Study area and population*

South Okkalapa township is situated 12.87 kilometers from downtown Yangon and 1900.72 acres wide. It is quite close to Yankin, Thingangyun, North Okkalapa and Dagon Satellite Townships. The total population were 162992 and women of childbearing aged between 15-49 years were 79644, which was nearly 50% of the population. There are 13 wards in the township with the mixture of low, middle and high social classes. The South Okkalapa Women's and Children's Hospital, is situated in No. 10 ward. In 2001, abortion-delivery ratio was 1:4 with the actual number of 730 and 2833 respectively. Abortion and its complications contributed more than half of the total admissions to gynecological wards and induced abortion comprised 5% to 29.2% of these abortions according to South Okkalapa Women's and Children's Hospital data, 2001.

### *Sample size and sampling procedure*

The study population comprises 572 currently married women aged 15-49 year. The study area comprises 13 electoral units of which 5 clusters were chosen to obtain the desired sample size by means of random sampling. The eligible women were recruited during household surveys conducted at the selected electoral units with mixed social classes; low, middle and high respectively.

## **RESULTS AND DISCUSSION**

The coded questionnaires were entered by using EPI-INFO software and data analysis was performed by SPSS software version 10.00.

### *Duration of study*

Study period was from 1<sup>st</sup> May 2002 to 31<sup>st</sup> October 2002.

### *Findings and Discussion*

More than three quarter (77.7%) of the study sample were aged 30 years and above. One third were educated up to the middle school level and nearly half (47.8%) were high school and university graduates. Less than one percent did not have formal education which was much less than in the North Okkalapa community-based study in which 16.04 percent had either monastic education or had attended 3 R classes and could read and write [7]. Seventy three percent were housewives. The majority (93.5 percent) were Buddhists.

The husbands of the respondents belonged to a higher education level. More than half (55.4%) of the husbands of the respondents were high school or university graduates. Almost all of them, except six were gainfully employed in the public or private sector or obtained their livelihood by doing odd jobs. Nearly two-thirds had an income ranging in between 10,001-50,000 Kyats per month.

Some 32.3 percent had married before the age of 20 years. This 32.3 percent (age of marriage) is much less than 54.26 percent found in the North Okkalapa study [7]. Also in a study on birth spacing practices in twenty townships, 51.79 percent of women were married below the age of 19 years [10].

The modal duration of marriage was 10-14 years in one-fifth of the study population, 20 percent each had been married for 5-9 years, 15-19 years and 5-9 years respectively. Only 16 percent had been married for less than four years.

Four hundred and sixty women (80.4%) belonged to the parity 1-3 group whereas 10 percent were parity 4-6 group and nearly 9 percent have not conceived yet.

Table 1. Type and number of abortion of the study population

Variables	Frequency N=572	Percentage
Type of abortion		
Spontaneous	106	18.5
Induced	19	3.4
Number of abortions		
Once	97	17.0
Twice	22	3.8
3 times	3	0.5
4 times	3	0.5
Never	447	78.1

According to Table 1, a history of abortion is given by 21.9 percent of the study sample which is slightly higher than 14 percent of the sample in the birth spacing study mentioned above [10]. This figure appears comparably low to 57 percent of abortion in the North Okkalapa study [7]. However, abortion is known to be notoriously high in hospital-based studies [11, 12].

A history of induced abortion was obtained only in 3.4 percent of women in our study which is only half (6.3%) of the above mentioned community-based study in North Okkalapa. Hospital studies indicate that 20

to 25 percent of all abortion admissions are induced [11, 12]. In South Okkalapa Women's and Children's Hospital, induced abortion ranged from 5 to 29.2% of abortions admissions with average of 21.1%.

Table 2. Specific abortion rate among currently married women, aged 15-49 years by socio-demographic and reproductive characteristics

Variables	N	Abor-tions	Rate	Signi-ficance
<b>Age group (in years)</b>				
<25	52	3	5.9	p = 0.000***
25-29	76	6	7.9	
30 & +	444	116	26.1	
<b>Duration of marriage (in years)</b>				
1-4	91	5	5.5	p < 0.001***
5-9	128	21	16.4	
10+	353	99	28.0	
<b>Contraceptive users</b>				
Ever	468	93	19.9	p = 0.02**
Never	104	32	30.8	

\*\*Significant at P = 0.05

\*\*\*Significant at P = 0.001

Specific abortion rates are presented in Table 2. Histories of abortion were more common in those women of an older age group and longer duration of marriage, revealing significantly increasing trend. This trend was also found in the North Okkalapa community-based study but no statistically significant differences were

observed among those with 5 year age group of age at first marriage, low to higher level of educational attainment of respondents, and those with low or high per head income.

When crude odds ratio were estimated in Table 3, women aged between 25-29 years and women over 30 years had risk of abortion 1.4 times and 5.6 times higher than those aged less than 25 years. Those who were married for 5-9 years and more than 10 years had risk of abortion 3.4 times and 6.7 times higher than those married for 1-4 years.

However, after logistic regression was performed to determine adjusted odds ratio of having risk of abortion, those women who were married for 5-9 years had 2.9 times and those whose marriage was more than 10 years had 3.4 times higher than those married for 1-4 years.

Abortion was considered having immediate, intermediate and remote medical and social sequelae. For immediate sequelae, 2 out of 19 patients (10.5 percent) who had induced abortion were required blood transfusion (Table 4). One third of women with history of induced abortion needed to borrow money (31.6%).

Among the intermediate sequelae of abortion, pelvic pain was complained by 6 out of 19 (31.6 %). Thirteen out of 19 induced Thirteen abortion patients (68.5 percent) need bed rest and away from work for more than 10 days.

Table 3. Crude odds ratio and adjusted odds ratio of logistic regression on risk of having abortions of currently married women, aged 15-49 years

Variables	History of abortion		Crude odds ratio	95% CI	Adjusted odds ratio	95% CI
	Yes	No				
<b>Age(in years)</b>						
25	3	49	1.00		1.00	
25-29	6	70	1.37	0.32-5.74	0.97	0.27-3.44
30 and above	116	328	5.64	1.72-18.44	2.29	0.72-7.22
<b>Duration of marriage (in years)</b>						
1-4	5	86	1.00		1.00	
5-9	21	107	3.37	1.22-9.31	2.88	1.12-7.38
10+	99	254	6.70	2.64-16.99	3.44	1.31-9.01

Table 4. Types of sequelae of abortion among induced abortion

Sequelae	No.	Percent (N = 19)
<i>Immediate</i>		
Medical : Blood transfusion	2	10.5
Social : Borrowed money	6	31.6
Contraceptive use following abortion	14	73.7
<i>Intermediate</i>		
Medical : Pelvic pain following abortion	6	31.6
Social : Bed rest for more than 10 days	13	68.5
Away from work for more than 10 days	13	68.5
<i>Remote</i>		
Medical: Next pregnancy Outcome of next pregnancy	8	42.1
- Normal delivery	6	31.6
- Another abortion	1	5.3
- Ectopic pregnancy	1	5.3

Regarding the remote sequelae of abortion, 8 out of 19 women who had induced abortion got pregnant again (42.1 percent) but the others did not. The outcome of next pregnancy were; 6 had normal delivery, 1 had abortion and 1 ended with ectopic pregnancy.

### CONCLUSION

The event, usually unsafe abortions primarily stems from unwanted and unplanned or untimely pregnancies especially in peri-urban communities including South Okkalapa. Despite experiencing complications, 4.8% of the study population were repeat aborters. This fact should be taken into account in formulating strategie concerned with abortio reduction. The promotion of a high level of awareness in relation to dangers of abortion under unsafe conditions is a necessity for information, education and communication (IEC) campaigns. It is of great importance to conduct comprehensive research in fertility regulation behaviour after induced abortion.

### Recommendations

1. According to the present study, knowledge and practice on reproductive health and fertility regulation should be promoted for all women of reproductive age.
2. All women of reproductive age and the community should be provided with information on the dangers of septic induced abortion.
3. Training on post abortion care should be introduced among basic health personnel (e.g. midwifery-trained-personnels).

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