

PSYCHOSOCIAL ASPECTS OF REPEAT ABORTIONS IN SINGAPORE — A PRELIMINARY REPORT

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SYNOPSIS

The incidence and rate of repeat abortion has been rising steadily in Singapore from 10% of all abortions in 1975 to 42% in 1982. Arising from this, a psychosocial study was carried out on 100 repeat abortees using 100 first time abortees and 100 antenatal patients matched for age and race as controls. The preliminary results showed that there were no significant differences in most of the variables between the three groups except that the repeat abortees had more past pregnancies and more living children. The abortees (first time and repeat), had similar personality characteristics and did not show much evidence of depression before and two weeks after the abortions.

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INTRODUCTION

The rapid population growth after the Second World War had led to a radical change in the attitudes towards induced abortion as a supplementary method of birth control in Singapore. Before 1969, it was a grave offence to induce abortion or terminate pregnancy before term except for the purpose of saving the life of the mother. This was laid down under Section 312-316 of the Penal Code Chapter 119 (1).

The Abortion Act, 1969 of Singapore (2), which went into operation on 20 March 1970, liberalized the law relating to abortion by establishing the "Termination of Pregnancy Authorization Board" which could authorize treatment to terminate pregnancy by registered medical practitioners, without infringing the Penal Code. Broader medical, social and economic reasons were accepted as grounds for abortions. The law was further liberalized with the introduction of the Abortion Act 1974 (No. 24 of 1974) on 20 November 1974 (3) which allows termination of pregnancy before 24 weeks (to be carried out in approved institutions) for citizens or

to include categories due to other overriding medical, ethical or social reasons. With the passage of the Abortion Acts, the number of legalized abortions has been increasing steadily over the past 12 years reaching a high of 19,110 cases for the year 1982 giving a ratio of 45 abortions to 100 live births as shown in Table 1.

tions and the psychological effects of the procedure. They will be compared with two control groups - antenatal patients and first time abortees. It is hoped that the results may help this group of women to choose a safer and more convenient way of limiting their family size.

TABLE 1 LEGALIZED ABORTIONS AND LIFE BIRTH

Year	Number of* legalized abortions	Number of† life birth	Percentage of abortion in life birth
1970	1,913	45,934	4.2
1971	3,407	47,088	7.2
1972	3,806	49,678	7.7
1973	5,252	48,269	10.8
1974	7,175	43,268	16.6
1975	11,105	39,948	27.8
1976	12,930	42,783	30.2
1977	13,762	38,364	35.8
1978	14,294	39,441	36.2
1979	14,855	40,779	36.4
1980	16,412	41,217	39.8
1981	18,890	42,250	44.7
1982	19,110	42,400	45.1

*From Singapore Family Planning, and Population Board Annual Reports
 †From Statistical Yearbooks, Singapore

Repeat Abortions

Since the liberalization of abortion, the number of repeat abortions were found to be rising. A report from USA showed that the ratio of repeat abortion to first abortion has gone up from 3:97 (3.1%) in 1970 to 23:77 (30%) in 1976 as shown in Table 2. (4) Besides the increase in the absolute numbers of abortions, the number of repeat abortions in Singapore has also gone up steadily from 1,041 in 1975 to 4,604 in 1982, and the ratio to first time abortion rise from 9:91 (10%) in 1975 to 30:70 (43%) in 1982 as shown in Table 3. This is an unhealthy trend, as more mothers appear to be resorting to abortion as a means of limiting the size of the family. The object of this study is to find out the psychosocial characteristics of women who underwent repeat abortion, their reasons for repeat abor-

MATERIALS AND METHOD

The subjects consisted of 100 Chinese females age 15 to 44 years who requested for premature termination of pregnancy for the second or more times before their 16th week of pregnancy at the Kandang Kerbau Hospital, Singapore. The controls were matched for age and race and consisted of 100 antenatal patients and 100 first time abortees. The age groups are shown in Table 4.

The investigation was in the form of a structured interview on the subjects. The interviews were carried out by an investigator trained for the purpose under the supervision of the Medical Social Worker and the authors. The first interviews were carried out on the patients before the abortions (when the patients turned

**TABLE 2
 TOTAL, FIRST AND REPEAT ABORTION*
 WOMEN AGED 15-44, USA, 1967-76**

Year	Legal Abortions	
	Total	Percentage of Repeat Abortions
1967-69	500,000	0
1970	193,500	3.1
1972	586,800	9.9
1974	898,000	17.5
1976	1,179,300	29.7

*Adapted from Tietze C., Family Planning Perspective, 1978 10: 286-288

TABLE 3
LEGALIZED ABORTIONS BY 1ST TIME AND REPEAT ABORTIONS,
1970-1982*

Year	Total	1st Time Abortees	Repeat Abortees	Percentage of Repeat Abortions
1970	1,913	-	-	-
1972	3,806	-	-	-
1974	7,175	-	-	-
1976	12,930	11,288	1,642	14.5
1978	14,294	11,373	2,921	25.7
1980	14,491	11,120	3,371	30.3
1982	15,548	10,944	4,604	42.1

Figures exclude menstrual regulation.

*Data obtained from Singapore Family Planning and Population Board.

TABLE 4 SUBJECTS BY AGE GROUP

Age	Antenatal	1st	Repeat	Total
15 - 19	2	5	5	12
20 - 24	27	23	19	69
25 - 29	40	36	34	110
30 - 34	25	22	24	71
35 - 39	6	7	15	28
40 - 44	0	7	3	10
TOTAL	100	100	100	300
Mean Age	27.42	28.30	28.67	28.13
SD	4.3	6.24	5.49	5.37

up to request for abortions) and the second interviews were carried out six weeks after the abortions. During the initial interviews, the subjects were asked to respond to items covering their marital history, education and occupation status, living conditions, obstetric history, contraceptive knowledge and practice, sexual development and practice, health and habits, and present relationship with family members and partners. The abortees were also administered the Eysenck Personality Questionnaire (5) and their mental state was assessed by the Zung Self Rating Depression Scale (6) which was repeated at the six weeks follow-up visits.

RESULTS

Social Characteristics

These findings are summarized in Table 5. There were less unmarried status (2%) among the antenatals (controls) than the first abortees (8%) and the repeat abortees (9%). However, the antenatals were married for shorter periods as only 46% were married for more than 4 years compared with 55% for the first abortees and 75% for the repeat abortees. This partly accounts for the antenatal patients having the least number of pregnancies and living children (mean 2.07 pregnancies and 0.88 living children), compared with the first

time abortees (2.67 and 1.52 respectively) and the repeat abortees (4.27 and 1.94 respectively).

First Abortees and Repeat Abortees

The structured interviews include questions on the subjects' living conditions, relationship with parents, siblings and spouse or partners, sexual development and practices, contraceptive knowledge and alcoholic and cigarette habits. There were no significant differences between the first time abortees and the repeat abortees in all these variables except in their contraceptive practices shown in Table 6 in which there are more repeat abortees using mixed methods. The two most common methods used for contraception were condom (29%) and rhythm (18%), followed by the pill which accounted for only 11% of the cases. This pattern of contraceptive practices probably accounts for their failure and hence the need to undergo abortion. Both groups chose mostly ineffective methods of contraception like condom, rhythm and withdrawal.

Their reasons for requesting abortion is shown in Table 7. The most common reason was "completed family" (44%), followed by "spacing of children" (20%). There was 10% "single" who requested for termination of pregnancy because although they had registered their marriage, they had not gone through the Chinese marriage ceremony because they were

TABLE 5 SOCIAL CHARACTERISTICS OF THE THREE GROUPS

Characteristics	Antenatal patients	First Time Abortees	Repeat Abortees	Statistical Significant
<u>Marital Status</u>				
Married or Cohabiting	100	92	91	$X^2 = 7.819$ P 0.01
Single	0	8	6	
Separated eg. divorced widowed etc	0	0	3	
<u>Year Married</u>				
Up to 2 yrs	41	25	12	$X^2 = 44.694$ P 0.001
2.1 - 4 yrs	13	14	11	
4.1 - 8 yrs	35	22	34	
8.1 yrs & above	11	25	34	
Not married	0	14	9	
<u>Gravida</u>				
1	39	22	0	$X^2 = 114.19$ P 0.001
2	29	20	12	
3	18	33	18	
4-5	14	25	50	
6-9	0	0	20	
Mean	2.07	2.67	4.27	
<u>No. of Children</u>				
Nil	42	22	12	$X^2 = 49.604$ P 0.001
1 child	33	21	18	
2 children	20	42	42	
3 or more	5	15	28	
Mean number	0.88	1.52	1.94	
<u>Educational Level</u>				
Nil	10	5	10	$X^2 = 9.405$ N.S.
Primary	51	41	36	
Secondary	20	19	25	
Post-Secondary & above	19	33	27	
No reply	0	2	2	

TABLE 6 CONTRACEPTIVE PRACTICES

Main Methods	First Time Abortees	Repeat Abortees	
Condom	37	21)
Rhythm	20	15)
Pill	8	11)
Withdrawal	7	9)
Others	5	6)
Mixed	12	27)
			$X^2 = 4.375$ N.S.
			$X^2 = 7.184$ P 0.01

TABLE 7 REASONS FOR REQUESTING ABORTION

Reasons	First Time Abortees	Repeat Abortees	Both Groups
Completed family	41	47	88
Spacing	21	19	40
Single	14	7	21
Financial	8	10	18
Others	16	17	33
TOTAL	100	100	200

 $X^2 = 3.0949$, DF = 4, N.S.

still waiting for allocation of low cost flats (Housing and Development Board flats). There were more first time abortees affected by this accommodation problems (14%).

Personality Characteristics

The Eysenck Personality Questionnaire (5) was administered to all the abortees. This questionnaire measures 4 personality dimensions - extraversion, neuroticism, psychoticism and "lie" score. The results which are shown in Table 8 did not show much difference between the two groups, except that the repeat abortees scored a slightly higher mean score for extraversion than the first time abortees. The difference although significant, is not sufficiently marked to be reflected in the actual behaviour of these subjects. The scores for extraversion, neuroticism and psychoticism were within the first standard deviations of the British norms, but the mean score for the "lie" scale was one standard deviation higher.

Depression

The Zung Self Rating Depression Scale (6) was administered to all the abortees before the six weeks after their abortions (see Table 9). There was no evidence of depression among the abortees. Only two cases scored above the 60 points which is the mean for a group of depressed patients. (7) The first time abortees showed a slightly lower mean score (39.04) than the repeat abortees (41.25), but there was no significant difference between the two groups six weeks later, by which time there was a significant reduction of 5 points showing an improvement of the mood state in these two groups of patients after their abortions.

DISCUSSION

The rising incidence and rate of repeat abortions have been recorded with concern in many countries. (4, 8, 9, 10) Results from observations on repeat abortees were conflicting. Tietze (4) found that they were more fecund, sexually active and used abortion as a method to resolve problems. Somers (1977) (11) found higher recidivism rates among divorced and separated women but Jacobson et al (12) and Rovinsky (13) found higher ratio of married. In this study, there was no difference in the marital status between the first time and repeat abortees. Although there were many reports on repeat abortions, there were not many studies using first time abortees and antenatals as controls. The main focus of the few controlled studies was on the reason for repeating abortion. The important reasons for requesting abortions are contraception failure (14) and contraceptive failure, (10) medical contra-indications or lack of supplies of contraception (15). In this study, most of the cases used ineffective methods of contraception like the condom, safe period, and withdrawal. Other factors described included unsupportive homes and unloving mothers, (16) and unstable interpersonal relationship (17) which are not found in this study.

Although there were a number of studies involving the administration of personality inventories on abortees, there were no report of such studies on repeat abortees. Freeman et al (18) who applied the Hopkins Symptom Check List - 90 on their patients before and two weeks after the abortion, found that the scores for repeat abortees were higher for interpersonality, sensitivity, paranoid ideation, phobic anxiety, sleep dis-

TABLE 9 EYSENCK PERSONALITY QUESTIONNAIRE RESULTS

		British Norms(F) Age 20-29	First Time Abortees	Repeat Abortees	Significance between 1st Time and Repeat Abortees
Extraversion	Mean	12.89	8.84	10.41	F = 7.633
	SD	4.70	3.92	3.61	P = 0.006
Neuroticism	Mean	12.89	10.56	10.21	F = 0.259
	SD	4.99	4.85	4.29	P = 0.611
Psychoticism	Mean	2.79	3.85	4.77	F = 3.760
	SD	2.41	2.49	3.81	P = 0.054
"Lie" Score	Mean	7.17	14.79	14.64	F = 0.077
	SD	3.85	3.16	3.79	P = 0.782

TABLE 10 ZUNG SELF RATING DEPRESSION SCALE RESULTS

		First Time Abortees	Repeat Abortees	Significance
Before Abortion	Mean	39.04	41.25	F = 3.896
	SD	7.51	8.22	P = 0.050
6 weeks after	Mean	34.46	35.14	F = 0.183
	SD	8.24	7.47	P = 0.670

turbance, somatization, hostility and psychoticism. Anxiety and depression continued to be elevated two weeks later. These findings did not agree with this study in which there was no difference in neuroticism and psychoticism, and depression between the first time and repeat abortees, and instead of a deterioration, there was an improvement in the scores for depression six weeks later.

CONCLUSION

Unlike some of the reports from Europe and USA, in this study there was not much difference between the repeat abortees and the first time abortees except that the former had more past pregnancies and more living children. When they are controlled for age and ethnic group, their educational and social economic variables, their personality characteristics and their mood state were similar. Apart from their higher fecundity, and hence the need for repeat abortions, they do not differ from other normal women eg. antenatals.

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