

Epidemiology
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STUDY OF ABORTION AT FARAH MATERNITY HOSPITAL, TEHERAN*

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ABSTRACT This study on abortion was carried out at Farah Maternity Hospital on the basis of: 1) the total admission recorded between 1960-1967 and 2) an interview questionnaire on 1009 women who had been referred for complications of termination of pregnancy, induced or spontaneous, between October 1968 and March 1969. There was an increase of 332% in admission for deliveries and 236% for abortions. The apparent increase in admission signifies a greater use of hospital facilities for deliveries, while the increase in admission for abortion, though not as high as the admission for delivery, still may be an indication of a trend towards more use of abortion for unwanted pregnancies.

The percentage of abortions in this study ranged between 11-17%, but it is about 15% for recent years. The increasing rate of abortion after the year 1966 (the beginning year of the family planning program) shows that this program has not yet been very effective in preventing unwanted pregnancies in the lower socio-economic groups.

INTRODUCTION Traditionally, the incidence of spontaneous abortion has been

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given as 10% of all pregnancies. Such data have at least two instabilities: 1) failure to include early abortions and 2) the inclusion of induced abortions. At the present time, however, the incidence is about 10-15%. (1, 2)

The incidence of illegal abortion is, for obvious reasons, unknown, but most observers believe that it is very high. It reaches even to 50% in some Latin American countries. (3)

This report is concerned with the problems of abortion in Iran because, despite its socio-economic and medical importance, it has not yet been investigated completely.

MATERIALS AND METHODS

This study was carried out at Farah Maternity Hospital on the basis of:

1. Records of the total number of women who had been referred for deliveries or for complete abortion during the years 1960-1967.
2. An interview-questionnaire on 1009 women who had been referred to this hospital for complications resulting from termination of pregnancy, induced or spontaneous, from October 1968 to March 1969. These women were interviewed by a physician and the questionnaire included questions on the duration of pregnancy and some personal characteristics.

RESULTS AND DISCUSSION

Registered Cases

As shown in Table 1, the total number of women referred to the Farah Maternity Hospital from 1960-1968 has increased four times. If, for the sake of analysis, the admissions in the year 1960 are recorded as 100, the increase in admission rate for delivery is seen to be 333%, while the increase for abortion is seen to be 286%. This is probably due to a greater awareness of the people to avail of the hospital facilities for deliveries, and the not-so-apparent increase in the number of abortion admissions in comparison with the total number of admissions could be due to some of the following reasons:

1. An awareness of the people of the complications of induced abortion in unskilled hands and hence reference to more competent people with fewer ensuing complications which would need hospitalization.
2. Changes in hospital policies for the acceptance of complicated cases of abortion.
3. As shown in other places, hospitals do not show the true prevalence of abortion among the population, as only

cases with complications are referred to these places.

Interviewed Cases

One thousand nine women were analysed for personal characteristics and experience of abortion. Table 2 shows the age distribution of these women who had been admitted for complications due to abortion; a high proportion, i.e. 16% of the total admission, were in the age group 15-19. This could possibly be explained by:

- 1) a high proportion of medical complications in early pregnancy among the teenage group as compared with other age group;
- 2) unmarried mothers, some among school girls, who seek induced abortion, although the distribution of unmarried mothers may be equal in other age groups as well;
- 3) young married teenagers not wishing to have children.

This is further explained in Table 3, which shows that 16.5% of the total admissions for complications of abortion were among women who had no children. Seventy-one percent of the women in the age group 15-19 were childless, and 35.5% had 2 children (20-24 age group). This may signify a trend towards limiting the family to 2-3 children.

Table 4 shows the relationship between the number of previous abortions and the age group of the women. As can be seen, the number of abortions increases in relation to age, although 59% of those who were referred had no previous experience of abortion. The lowest rate of previous abortions was among the youngest age group (14.7%). This rapidly increased to 57.1% among the 35-39 age group. Therefore, we may assume that this group, having the desired number of children was seeking induced abortion, in comparison with the younger group which was probably experiencing spontaneous abortion.

Table 5 shows the relationship between the duration of pregnancy at the time of abortion and the age group of the women. The highest proportion, i.e. 18% and 25% (43% of the total number of abortions), took place during the 2nd and 3rd months of pregnancy, and we can assume that most abortions of the 1st, 5th and 6th months are probably spontaneous (due to the severe complications of induced abortion at these stages). Thus we have a large percentage, i.e. 43%, which is probably mostly induced, and therefore, the duration of pregnancy at the time of abortion may be a useful indication of the type of abortion.

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TABLE 1

Data analysis showing % increase in rate of deliveries and abortions in relation to the total number of admissions

Year	Admission		Delivery		Abortion	
	No.	%	No.	%	No.	%
1960	14112	100	10896	100	1446	100
1961	20890	148	16490	155	3477	142
1962	26709	185	21765	199	3326	136
1963	31913	226	27258	250	3655	148
1964	37826	268	31250	289	4958	201
1965	42669	302	35675	327	5739	233
1966	46887	332	39069	359	6271	254
1967	47189	333	38475	353	7701	286

TABLE 2

Distribution of admission by age group at Farah Maternity Hospital, 1968

Age Group	Total Number	Percentage
15-19	162	16
20-24	220	21.8
25-29	175	17.3
30-34	217	21.5
35-39	161	15.9
40-44	67	6.6
45+	7	0.69

TABLE 3

Age distribution of admissions and % of living children at the time of abortion at Parah Maternity Hospital, 1968

Age Group	Total Admissions	% without children	% with 1 living child	% with 2 living children	% with 3 living children	% with 4 living children	% with 5 living children	% with 6 living children	% more than 6 children	Average living children per woman
15-19	162	71.3	24.4	4.3	-	-	-	-	-	0.33
20-24	220	16.5	25.0	35.5	18.6	3.6	0.5	0.5	-	1.7
25-29	175	4.9	6.5	20.2	31	20	14.1	2.8	0.6	3.14
30-34	217	2.7	5.0	12.0	17.6	23.1	20	16	3.6	3.82
35-39	161	1.5	1.5	5.0	14.6	16.4	22	20	0.19	5.1
40-44	67	-	3.0	6.5	6.5	21	9	22	0.32	5.58
45+	7	-	-	-	14	-	14	58	0.44	5.7
---	1009	16.5	12.0	15.8	16.0	13.3	10.8	9.2	6.4	

TABLE 4

Age distribution of admissions by number of previous abortions at Farah Maternity Hospital, 1968

Age Group	Total Admissions	No Previous Abortion %	1 Abortion %	2 Abortions %	3 Abortions %	4 or More Abortions%	Total
15-19	162	85.0	13.0	1.1	--	0.6	14.7
20-24	220	68.0	20.0	6.0	4.0	0.9	31.8
25-29	175	58.0	24.0	9.1	3.4	4.0	
30-34	217	49.0	25.0	13.0	5.5	7.0	41.1
35-39	161	42.0	26.0	19.0	7.4	3.7	57.1
40-44	67	45.0	31.0	12.0	6.0	6.0	55.2
45+	7	57.0	14.0	--	--	28.0	42.8
--	1009	59.0	22.0	9.7	4.2	3.6	41.5

TABLE 5

Age distribution of admissions and duration of pregnancy at time of abortion at Farah Maternity Hospital, 1968

Age Group	Total Admissions	% Before one month	% one month	% two months	% three months	% four months	% five months	% six months
15-19	162	--	4.3	27.0	21.0	16.0	17.0	13.0
20-24	220	--	4.0	28.0	28.0	20.0	9.0	20.0
25-29	175	--	16.0	27.0	20.0	21.0	11.0	3.5
30-34	217	2.3	11.0	27.0	30.0	17.0	8.3	3.6
35-39	161	1.2	14.0	35.0	25.0	11.0	4.4	3.7
40-44	67	--	--	44.0	37.0	9.0	10.0	1.4
45+	7	--	14.0	28.0	57.0	--	--	--
--	1009	0.69	10.0	18.0	26.0	17.0	10.0	6.4