

CONSULTANT REPORT
INCOMPLETE ABORTIONS TREATED AT JAHANSHAH SALEH
HOSPITAL IN TEHRAN, IRAN FROM MAY 14, 1973
TO APRIL 30, 1974

Yahya Behjatnia, M.D.

Prepared by:
Eva R. Miller, M.A.

INTRODUCTION

Treatment of the patient who comes to the hospital with pre-existing medical conditions, such as a threatened, inevitable, or incomplete abortion often poses a greater problem to the physician than treatment of a healthy patient requesting an induced abortion. Whether the pre-existing condition is a result of criminal intervention or the result of a spontaneous abortion, the patient often may have been bleeding for as long as 48 hours before seeking medical assistance in completing the abortion. Reasons for this delay in seeking treatment probably range from lack of information to fear of repercussions from

* Department of Obstetrics and Gynecology University of Tehran¹
School of Medicine

This work was supported in part by the International Fertility Research Program, Chapel Hill, North Carolina (AID/csd 2979).

involvement in criminal acts. In these cases, risks of blood loss, infection, and other complications associated with induced abortion are greatly increased. This study was undertaken to assess the needs of patients admitted to the Jahanshah Saleh Hospital of the University of Tehran School of Medicine for treatment of incomplete abortion. Analyses included 100 patients admitted to this hospital from May 14, 1973 to April 30, 1974.

Most of the patients (97) were admitted to the hospital with incomplete or inevitable abortions. Of the remaining three, one patient was admitted with a septic abortion, one with a threatened abortion, and one patient was admitted for a therapeutic abortion as a result of a psychiatric condition (Table I). No concurrent surgery was performed in any case.

Data were recorded on standardized patient record forms provided by the International Fertility Research Program. These forms were edited by visual and computerized scanning procedures before the information was compiled and analyzed.

Patients were requested to return to the hospital for a follow-up visit between two and four weeks after treatment. The upper limit on follow-up visits was 90 days; according to these criteria the rate of follow-up was 58 percent (table I).

RESULTS

Patient Characteristics

Socio-Demographic Data

All but two of the patient were Muslims. Almost all women resided in urban: 96 percent were from Tehran; 2 percent were from other cities, and 2 percent were from surrounding rural areas.

Eighty-two percent of the patients were married and eighty-nine percent were not currently employed, Sixty-three percent of the patients had never attended school 1 the mean number of years of formal education was 2.6 (Table II).

Reproductive History

The mean parity (total live births) was 3.2. Twenty-one percent of the patients were nulliparous; these patients were less than 30 years old. Women 30 to 34 years of age had a mean parity of 4.8 those in higher age groups had markedly higher parity (Table III).

48 percent of these patients have excess fertility. Excess fertility is defined as the percentage of women under 20 years of age of parity one or more or the percentage of women over 20 years of age of parity four or more.

Previous pregnancy outcomes were compared by patients' ages (Table IV). Spontaneous abortions were approximately three times more frequent than prior induced abortions for all age groups.

Rates of child loss were high in all age cohorts, especially as contrasted to rates of stillbirth (Table IV). Twenty-five percent of the women in this study had experienced at least one child loss.

Desired Family Size

Forty percent of the women in this study had three or more living children and did not want any more children. An additional 4 women with 1 or 2 children wanted no additional children. However, the majority of the women (56%) wanted additional children. Women in the age cohort 20 to 29 years were more likely to respond that they wanted additional children than women in other age cohorts (Table V and Figure 1).

Contraceptive Behavior

Twenty-three percent of the patients were non-contraceptors before and after hospital treatment. Among those patients contracepting during the month of conception, rhythm or withdrawal, systemics, and condoms were used. Among those using contraception after the procedure, high use-effective methods were used by 39.7 percent (systemics 25.9%, IUDs 12.1%, and tubectomy 1.7%). Figure 2).

Clinical Management

Ninety-eight percent of the patients were treated by dilatation and curettage (D&C); two were treated by vacuum aspiration. No repeat procedures were performed. One patient treated by D&C had

retained products of conception following the procedure. Her case was complicated by a cervical laceration and pelvic infection. Data were not available on subsequent treatment. All patients undergoing D&C were administered analgesics prior to the procedure. One of the patients undergoing vacuum aspiration was given analgesics, the other patient were administered local anesthetics.

Gestational Age

Gestational age, as defined in this study, was the number of weeks from the first day after the patient's last menstrual period to the time of treatment. Gestational ages ranged from 4 to 28 weeks; 86 percent of the patients were treated during first trimester (Table VI).

Complications

Complications were categorized according to their time of occurrence. Immediate complications were those occurring from the time of hospital treatment to the time of hospital discharge. Follow-up complications were those occurring from the time of hospital discharge to the time of the follow-up visit, even if the complication did not require treatment at the time of follow-up. It should be noted that in a study of incomplete abortion it is most difficult, if not possible to determine whether complications are attributable to the pre-existing medical condition or to the hospital procedure.

Excessive blood loss (over 100 ml) was the most frequently reported complication during hospitalization. Fever requiring antibiotic treatment and pelvic infection were the modal (most frequently occurring) follow-up complications. In all, 24 (24%) women experienced at least one complication (Table VII).

Procedure and Hospitalization Times

As expected, procedure times and lengths of hospitalization were longer for those patients experiencing immediate complications than for those without immediate complications (Table VIII).

Only eleven patients in the study required hospitalization overnight (and in those cases usually only one night). None of the patients

were readmitted after discharge from the hospital.

Table I

DISTRIBUTION OF ABORTION CASES BY PRE-EXISTING MEDICAL CONDITIONS AND FOLLOW-UP AT SALEH HOSPITAL IN TEHRAN, IRAN FROM MAY 14, 1973 TO APRIL 30, 1974

Pre-existing Medical Condition	Followed-up		Lost to Follow-up		All Women	
	Number	Percent	Number	Percent	Number	Percent
Incomplete or Inevitable Abortion	57	57.0	40	40.0	97	97.0
Septic Abortion	1	1.0	-		1	1.0
Threatend Abortion	-	-	1	1.0	1	1.0
Psychiatric Condition	-	-	1	1.0	1	1.0
TOTAL	58	58.0	42	42.0	100	100.0

Table IV
 PREVIOUS PREGNANCY OUTCOME EVENTS AND CHILD LOSS
 BY AGE AMONG 100 PATIENTS TREATED FOR INCOMPLETE
 ABORTION AT SALEH HOSPITAL IN TEHRAN, IRAN FROM MAY
 14, 1973 TO APRIL 30, 1974

Event	Age						All Women Rate/ 1000
	<20 N(=19) ¹	20-29 N(=40)	30-39 N(=34)	40+ N(=6)	N(=99) ²	Rate/ 1000	
<u>Portions, prior to this admission</u>							
Induced	5	13	17	—	35	—	74.6
Spontaneous	15	30	42	14	101	259.3	215.4
Total	20	43	59	14	136	259.3	290.0
<u>Term Deliveries</u>	8	95	190	40	333	740.7	710.0
Stillbirths	—	4	6	—	10	—	21.3
Live births	8	91	184	40	323	740.7	688.7
<u>Children³</u>							
Living	6	78	148	32	264	800.0	817.3
Male	4	45	75	20	144	500.0	445.8
Female	2	33	73	12	120	300.0	371.5
Loss	2	13	36	8	59	200.0	182.7
Total Pregnancies ⁴ prior to this admission	28	138	249	54	469	9000.0	4737.4

Rates are per 1000 pregnancies, except where specified.

One case was omitted, because information on several variables was missing.

Rates are per 1000 live births.

Rates are per 1000 women.

Table V
 COMPARISON OF ADDITIONAL CHILDREN DESIRED BY NUMBER OF LIVING CHILDREN AND BY PATIENT'S AGE FOR 100 PATIENTS TREATED FOR INCOMPLETE ABORTION AT SALEH HOSPITAL IN TEHRAN, IRAN FROM MAY 14, 1973 TO APRIL 30, 1974

Number of Living Children	Age	None		One		Two		Three or more		All Women	
		No.	%*	No.	%*	No.	%*	No.	%*	No.	%**
None	15-19	-	-	2	15.4	9	69.2	2	15.4	13	54.2
	20-29	-	-	-	-	7	70.0	3	30.0	10	41.6
	30+	1	100.0	1	100.0	-	-	-	-	1	4.2
One	15-19	1	16.7	2	33.3	1	16.7	2	33.3	6	33.3
	20-29	-	-	6	60.0	2	20.0	2	20.0	10	55.6
	30+	1	50.0	-	-	1	50.0	-	-	2	11.1
Two	15-19	-	-	-	-	-	-	-	-	-	-
	20-29	1	16.7	2	33.3	2	33.3	1	16.7	6	85.7
	30+	1	100.0	-	-	-	-	-	-	1	14.3
Three or more	15-19	-	-	-	-	-	-	-	-	-	-
	20-29	10	66.6	3	20.0	1	6.7	1	6.7	15	29.4
	30+	30	83.3	4	11.1	1	2.8	1	2.8	36	70.6

Mean number of living children = 2.65

Mean number of additional children desired = 1.11

* Percent per row total.

** Percent per number of women in the sample with the same number of living children.

Table VI
 GESTATIONAL AGE BY TERMINATION TECHNIQUE FOR 100 PATIENTS TREATED FOR INCOMPLETE ABORTION AT SALEH HOSPITAL IN TEHRAN, IRAN FROM MAY 14, 1973 TO APRIL 30, 1974

Gestational Period (in weeks)	Procedure				All Women	
	D&C		Vacuum Aspiration		Number	Percent**
	Number	Percent*	Number	Percent*	Number	Percent**
4-6	11	91.7	1	8.3	12	12.0
7-12	73	98.6	1	1.4	74	74.0
13-18	8	100.0	—	—	8	8.0
19-28	6	100.0	—	—	6	6.0

* Percent are row percents (per those patients within a Gestational period) rather than cell percents.

** Percents are per the entire sample.

Table VII
 COMPLICATIONS REPORTED* FOR 100 PATIENTS TREATED
 FOR INCOMPLETE ABORTION AT SALEH HOSPITAL IN TEHRAN,
 IRAN FROM MAY 14, 1973 TO APRIL 30, 1974

Reported Complication	Number	percent
<u>Immediate</u>		
Retained products of conception**	1	1.0
Cervical laceration without suture	1	1.0
Excessive blood loss, requiring transfusion	3	3.0
Excessive blood loss, not requiring transfusion	5	5.0
Shock (B.P. < 80 mg. Hg.)	1	1.0
Fever, requiring antibiotics	2	2.0
Women With At Least One Immediate Complication	10	10.0
<u>Follow-up*** (N-58)</u>		
Fever, requiring antibiotics	11	19.0
Pelvic infection	8	13.8
Pelvic pain	1	1.7
Vaginal discharge	2	3.4
Women With At Least One Follow-up Complication	15	25.9
Women With At Least One Complication	24	24.0

* All patients experiencing complications were treated by D&C.

** Instances of retained products of conception are not included in calculation of rates of immediate or total complications.

*** Rates of follow-up complications are per women followed-up.

Table VIII

MEAN PROCEDURE TIMES AND LENGTHS OF HOSPITALIZATION FOR 100 PATIENTS TREATED FOR INCOMPLETE ABORTION BY PROCEDURE AND COMPLICATION STATUS AT SALEH HOSPITAL IN TEHRAN, IRAN FROM MAY 14, 1973 TO APRIL 30,

1974

Procedures	No Immediate Complications		1+ Immediate Complications	
	Number	Mean S.D.	Number	Mean S.D.
<u>D&C</u>				
Procedure time (in min.)	88	9.51 3.00	10	12.20 5.34
Hospitalization* (in nights)	8	1.00 —	3	1.33 0.47
<u>Vacuum Aspiration</u>				
Procedure time (in min.)	2	8.00 —	—	—

* Only for those patients hospitalized at least one night. Note that the two patients treated by vacuum aspiration were not hospitalized overnight.

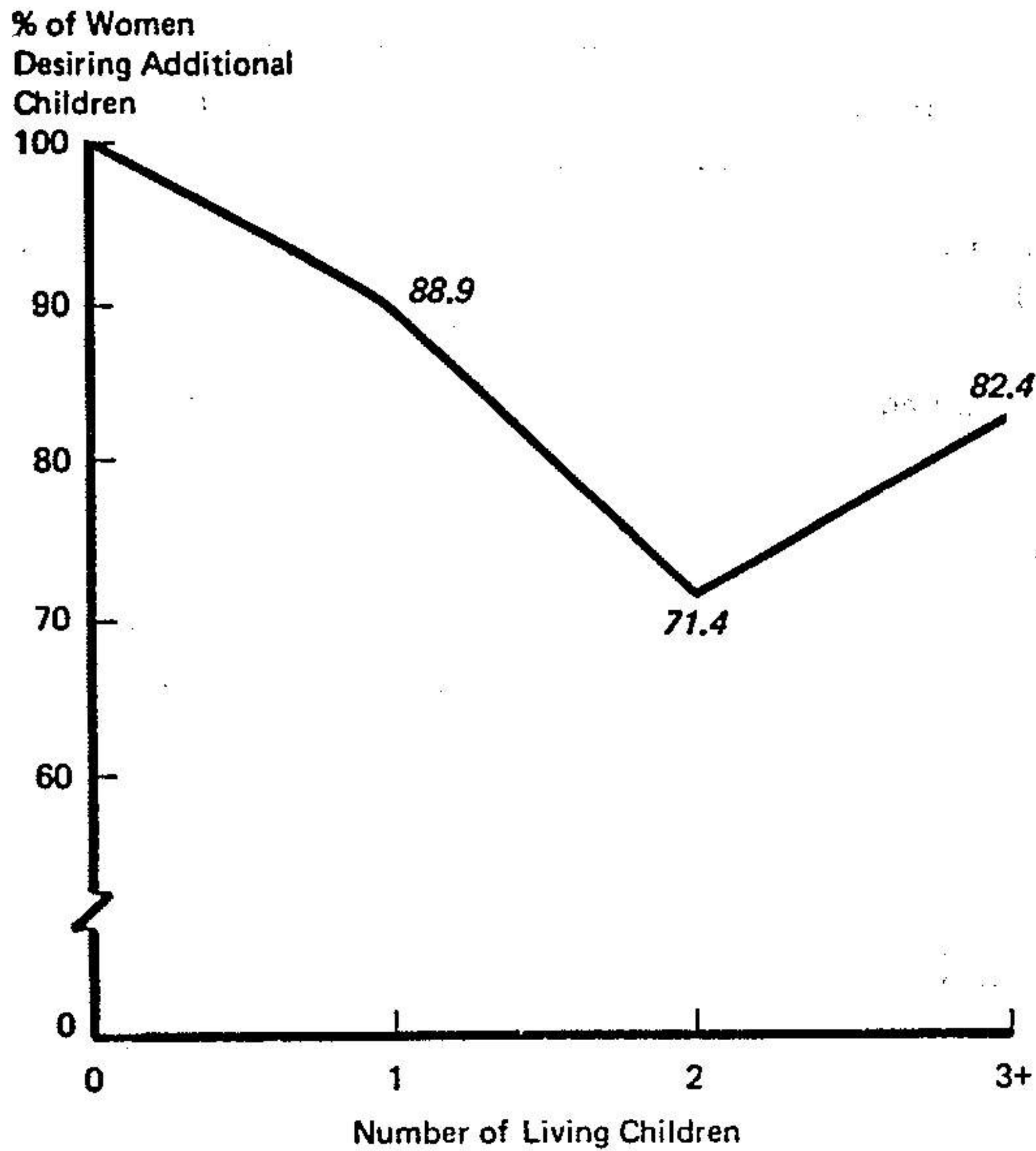


Figure 1: Comparison of Additional Children Desired by Number of Living Children for 100 Patients Treated for Incomplete Abortion at Saleh Hospital in Tehran, Iran From May 14, 1973 to April 30, 1974.

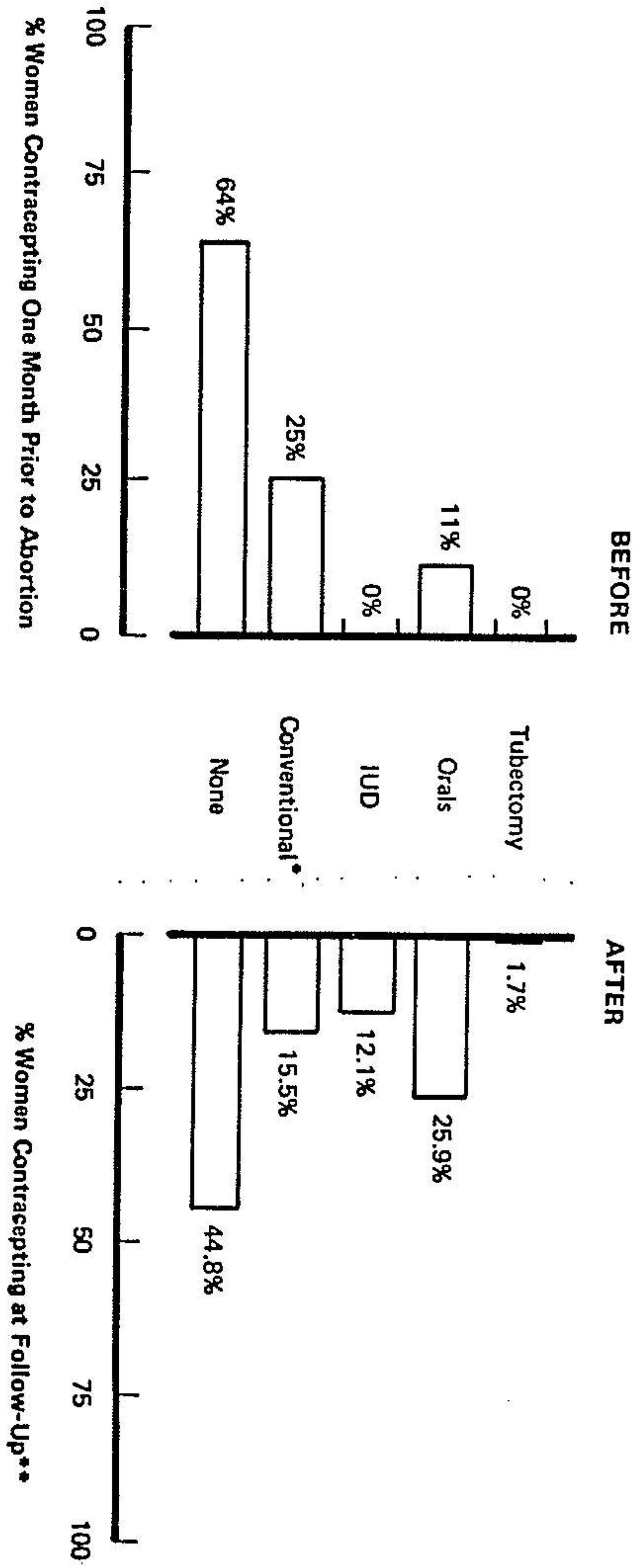
Table II
 SELECTED SOCIO-DEMOGRAPHIC CHARACTERISTICS FOR 100
 PATIENTS TREATED FOR INCOMPLETE ABORTION AT SALEH
 HOSPITAL IN TEHRAN, IRAN FROM MAY 14, 1973 TO APRIL 30,
 1974

Patient Characteristic	Number	Percent
<u>Marital Status</u>		
Married	82	82.0
Formerly Married	18	18.0
<u>Patient's Education (yrs.)</u>		
0	63	63.0
1-6	24	24.0
7+	13	13.0
Mean	2.55	
<u>Husband's Education* (yrs.)</u>		
0	33	40.0
1-6	32	39.0
7+	17	20.8
Mean	3.99	
<u>Gainfully Employed</u>		
Yes	11	11.0
No	89	89.0

*Information is only for those patients who are currently married.

Table III
 AGE BY PARITY DISTRIBUTION FOR 100 PATIENTS TREATED
 FOR INCOMPLETE ABORTION AT SALEH HOSPITAL IN TEHRAN,
 IRAN FROM MAY 14, 1973 TO APRIL 30, 1974

Parity	Age												All Women	
	15-19		20-24		25-29		30-34		35-39		40+		No.	Percent
0	12	12.0	8	8.0	1	1.0	-	-	-	-	-	21	21.0	
1	6	6.0	5	5.0	1	1.0	2	2.0	-	-	-	14	14.0	
2	1	1.0	3	3.0	5	5.0	-	-	1	1.0	-	10	10.0	
3	-	-	3	3.0	5	5.0	4	4.0	2	2.0	-	14	14.0	
4	-	-	3	3.0	2	2.0	3	3.0	1	1.0	-	9	9.0	
5	-	-	-	-	4	4.0	4	4.0	4	4.0	2	14	14.0	
6	-	-	-	-	1	1.0	3	3.0	1	1.0	1	6	6.0	
7+	-	-	-	-	-	-	4	4.0	5	5.0	3	12	12.0	
Total	19	19.0	22	22.0	19	19.0	20	20.0	14	14.0	6	100	100.0	
Mean Parity	0.4		1.5		3.2		4.8		6.4		6.7		3.2	



* Rhythm, Withdrawal, Diaphragm, Foam, Jelly, Condom.
 ** Information is available only for those patients who were followed up.

Figure 2: Contraceptive Behavior for 100 Patients Treated for Incomplete Abortion at Saleh Hospital in Tehran, Iran From May 14, 1973 to April 30, 1974.

SUMMARY

In the period from May, 1973 to April, 1974, one hundred patients were treated for incomplete abortion at the Jahanshah Saleh Hospital in Tehran, Iran. Patients admitted to the hospital were from 4 to 28 weeks' gestation and were routinely administered analgesics before the abortion was completed by D&C. The D&C took about 10 minutes and the patient was usually able to go home that same day: Twenty-four women (24.0%) experienced complication(s) including blood loss, fever requiring antibiotic treatment, and pelvic infection.

REFERENCES

- 1- KERSLAKE D, CASEY D: Abortion induced by means of uterine aspirator. *Obstet Gynecol* 30:1967
- 2- NATHANSON BN: Ambulatory abortion: Experience with 26,000 cases (July 1, 1970 to August 1, 1971). *N Engl J Med* 286:403, 1972
- 3- World Health Organization: Abortion Laws: A Survey of Current world Legislation. Geneva, Who, 1971
- 4- World Health Organization: Spontaneous and Induced Abortion: Report of a who Scientific Group. Geneva, Who, 1970
- 5- TE LINDE, R.W.: *Operative Gynecology*, 3rd=, ?=phila, J.B; Lippincott Co. 1953