

# A COMPARATIVE STUDY OF INDUCED ABORTIONS BEFORE AND AFTER LEGALIZATION OF ABORTIONS

by

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and

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Induced septic abortion has been one of the leading causes of maternal mortality and morbidity in many of the countries. Tietze and Lehfeldt (1970) reported a mortality of 1,000/100,000 of such abortions when performed by untrained persons and 50-100/100,000 when performed by qualified persons. Compared to this, with legalized abortions the death rate was 3-4/100,000. It was suggested that by making abortions more readily available it will no longer be necessary for the woman to resort to dangerous methods of termination of her unwanted pregnancy. With this contention, change in abortion law has been suggested from time to time in different countries and it was in April, 1972 that this legal abortion law came into force in many states of our country. We in P.G.I. started doing legalised abortions from July, 1972 onwards. The main aim of the study has been to see the effect of these legalised abortions on the morbidity and mortality due to induced septic abortions.

## Material and Methods

The study deals with 2 groups of patients who were admitted to P.G.I.

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with problems of induced septic abortions. Group I consists of 88 patients who were admitted during 2½ year period before the legal abortion law (1st July, 1969 to 31st Dec. 1971) came into force. Second group consists of 133 patients who were admitted during 2½ year period (1st July, 1973 to 31st Dec. 1975) which was one year after the new liberalised law had been in force. The patients were further categorised into Type I, II and III.

Type I when infection was limited to uterus.

Type II when it had spread to uterine adnexa or pelvic peritoneum.

Type III, when it had spread beyond pelvis.

## Observations

In Group I there were 88 cases and 133 in Group II a significant increase in the number.

There has been no significant difference in the type of patients in the 2 groups as regards their domicile, age, parity and gestation period were concerned as shown in Tables I, II, III and IV respectively.

TABLE I  
Domicile

Residence	Group I	Group II
Rural	50	86
Urban	38	47

TABLE II  
Age

Age years	Group I	Group II
16-21	9	17
21-30	45	77
31-40	34	39
	88	133

TABLE III  
Parity

Parity	Group I	Group II
Nulliparous	7	12
P1	10	8
P2	30	40
P3	20	28
P4	21	45
	88	133

TABLE IV  
Term of Gestation

Gestation	Group I	Group II
After 1st missed period	24	49
After 2nd	42	50
After 3rd	14	14
After 4th	6	16
After 5th	2	4
	88	133

Maximum number of abortions in both the groups had been done by dais, though large number of doctors had also been resorting to this practice (Table V). In

TABLE V  
Distribution According to Abortinist

Abortinist	Group I	Group II
Doctor	18 (20.5%)	45 (34.1%)
Dai	50 (57.%)	60 (45%)
Nurse	13	16
Dai and Doctor	1	2
Unknown	4	10
Self Ind.	2	—
	88	133

Group I as compared to dais there were less number of unauthorised doctors who were indulging in this practice and doctor to dai ratio had been 1:3 while in Group II the ratio increased to 1:1.3 indicating that more and more of untrained doctors had been doing these abortions.

Common method of termination had been dilatation and curettage or stick in both the groups (Table VI).

TABLE VI  
Method of Induction

Method	Group I	Group II
D & C	30	69
Stick	24	35
Medicated swab	12	12
L.T.	4	5
? Soap Sol.	—	1
Unknown	18	11
	88	133

Our main concern lies around type III patients who are seriously ill and have either fulminant peritonitis, septicaemia and or renal failure. In Group I, 31% of the patients had type III sepsis with maternal mortality of 16 per cent while in Group II 43% of the patients had type III sepsis with maternal mortality of 20%.

Table VII shows the type of infection in both the groups. Renal failure, tetanus and gas gangrene had been the major causes of death in both the groups.

#### Discussion

It is presumed that by liberalisation of abortion it may be possible to reduce the morbidity and mortality due to criminal abortions but statistics from various countries reveal the falseness of this presumption. Gordon, (1968) reported from

TABLE VII  
Clinical Diagnosis

## Clinical diagnosis of Type III patients

Diagnosis	Group I	Group II
Tetanus	4 (4)	7 (7)
Gas gangrene	—	3 (3)
Renal failure	3 (1)	9 (5)
Perforation of uterus	5	3
Generalised peritonitis	13 (6)	16 (3)
Septicaemia with brain abscess	—	1 (1)
Septicaemia with S.A.B.E.	—	1 (1)
Septicaemia with Jaundice	1 (1)	2
Septicaemia with massive pulmonary embolism	—	1 (1)
Barbiturate poisoning	—	1 (1)
Acute haemolysis with ? soap solution	—	1 (1)

No. in brackets show deaths.

Japan that when abortions were virtually performed at request, in 1955 as many as 1,170,143 legal abortions were performed and at the same time 30,000 to 40,000 of criminal abortions were performed. Huldt, (1968) studied the effect of liberal Swedish law and found that there was no change in criminal abortion rate though there was fall in delivery rate. But Tietze and Lehfeldt, (1961) reported from Eastern Europe that with liberal abortion law there was decrease in criminal abortion rate.

The present study reveals that there was an increase in total number of patients in Group II who were admitted with induced septic abortion after liberal abortion law and the increase was more significant in type III patients who were seriously ill and had peritonitis, septicaemia and or renal failure; 31% of the total patients had type III sepsis in group I, while in group II, 43% of patients had type III sepsis, with corresponding increase in maternal mortality from 16% in group I to 20% in group II. Chief abortionist in group I had been 'dais' who per-

formed 57% of the induced abortions, while doctors were responsible for 20.5% of such abortions. In group II percentage of abortions performed by doctors increased to 34% while 'dais' were responsible for 45%. Probably the law has brought about a change in the climate of opinion among the public and practitioners. Patients feel less restrained to go in for termination of pregnancy and the doctors who might have been hesitant to do it in past feel more free to do it under the pretext of liberal abortion law. The morbidity and mortality with induced septic abortion can only be reduced if enough public propaganda is made to make the people especially in rural areas conscious of the hazards of induced abortion by 'dais' and unqualified personnel, simultaneously making them aware of the provision of law and facilities available at different centres.

Last but not the least courts of law should use firm hand for those unskilled and untrained persons who are not conforming to the law and are still resorting to the practice of criminal abortions.

Summary and Conclusion

Two groups of patients who were admitted with problems of induced septic abortion before and after legalisation of abortions have been studied. There has been increase both in total number of patients (88 patients in group I, 133 in group II) as well as in severity of infection. There were 34% of the patients who had type III sepsis with maternal mortality of 16% in group I, while in group II 43% of patients had type III sepsis with

maternal mortality of 20%. The percentage of untrained doctors who resorted to this practice increased from 20.5% in group I to 34% in group II.

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Discussion

The study compares and contrasts the results of induced abortions performed before and after the legalisation of the practice. The study was conducted in a tertiary care hospital in a developing country. The results show that there was an increase in the number of patients and the severity of infection in the group studied after legalisation. The study also shows that the percentage of untrained doctors who resorted to this practice increased from 20.5% in group I to 34% in group II. The study concludes that there has been an increase both in total number of patients and in severity of infection. There were 34% of the patients who had type III sepsis with maternal mortality of 16% in group I, while in group II 43% of patients had type III sepsis with maternal mortality of 20%. The percentage of untrained doctors who resorted to this practice increased from 20.5% in group I to 34% in group II.

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