## THE TRAGEDY OF ILLEGAL ABORTION?

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### Introduction

Abortion deaths constitute a significant proportion of maternal mortality. In fact, one-fourth to one-sixth of the maternal deaths can be attributed to abortion. Duff and Townsend (1975) report that in Austrialia, between 1967 and 1969, 52% of the abortion deaths were due to criminal interference. The same authors state that during the above period the corresponding figure for England and Wales was 63%.

To counteract the atrocious mortality associated with illegal abortion several countries have liberalised abortion laws. In India, the authorities, realising the grave threats posed by illegal abortion, finally legalised abortion with the Medical Termination of Pregnancy Act of 1971. This Act came in force from April 1, 1972. Despite the above step, 17 patients died at the King Edward Memorial Hospital, Bombay, as a result of criminal interference done elsewhere. This

paper intends to review these criminal abortion deaths.

### Material and Methods

The seventeen cases under study were hospitalised at the King Edward Memorial Hospital, Bombay, between April 1, 1972 and March 31, 1978. Each patient gave an history of criminal interference done elsewhere to terminate their pregnancies.

At the time of admission a detailed history was recorded and a thorough physical examination was carried out. Investigations were ordered as deemed necessary. Each of these patients was treated with the best accepted medical and surgical methods of treatment. Intensive monitoring of vital signs, repetitive investigatons including electrolytes and arterial blood gases, intravenous fluids including blood transfusions, broad spectrum antibiotics, exploratory laparotomy facility round the clock, even artificial kidney dialysis facility were all available at the above premier teaching institution. Post-mortem examination was performed on as many cases as possible.

The majority—8 (47.1%) were in the third decade of their lives.

Three girls were unmarried whilst 6 were widowed or separated. Majority of our patients were from the poor socioeconomic strata of the society. Only 2

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women had studied beyond the seventh standard.

#### Results

All the patients admitted to criminal interference done elsewhere, mostly in the hands of quacks or dais. Table I

TABLE I Method of Abortion

Method of Abortion	No. of cases	Percen- tage
Stick	8	47.1
Injection of solution	3	17.6
Douche	1	5.9
Unknown	5	29.4
Total	17	100

shows the methods used for performing the abortion. In majority of the cases, 8 (47.1%) a stick was used. In 3 cases unknown intravaginal solution was injected, whilst in 1 cases a high pressure douche was used. Five cases could not state the method as they were blindfolded prior to the procedure.

Table II shows the type of surgery carried out at hospital. Nine patients did

TABLE II Surgery Performed

Type of Surgery	No. of cases	Percen- tage
Exploratory laparotomy	5	62.5
Blunt curettage	2	15.0
Colpotomy and drainage	1	12.5
Total	8	100

not undergo any surgery. Of the 8 patients that were treated surgically, 5 underwent an exploratory laparotomy, 2 had a dilatation and evacuation, whilst 1 had a colpotomy with drainage. All the cases with tetanus were treated conservatively at the specialised Tetanus Unit in our hospital.

A post-mortem was done in 11 of the 17 cases, i.e., in 64.7% of the cases. Table III lists the causes of death. As

TABLE III Cause of Death

Cause of Death	No. of cases	Percen- tage
Tetanus	6	35.2
Septicaemia	4	23.5
Septic shock	2	11.8
Intestinal injury with sepsi	s 2	11.8
Uterine injury with sepsis	1	5.9
Coagulopathy	1	5.9
Cardiac failure	1	5.9
Total	17	100

can be seen, tetanus is the number one killer in criminal abortion. Septicaemia and septic shock run a close second. Perforation with sepsis was present in 3 cases. One patient each died of coagulopathy and cardiac failure.

### Discussion

As many as 17 patients died of criminal abortion at the K.E.M. Hospital after abortions were legalised in India. The above figure may be high as the above hospital receives emergencies from a large number of smaller public and private nursing homes. However, during the same 6 year period as this study, 7,750 medical termination of pregnancies were performed at the K.E.M. Hospital with 7 deaths, a maternal mortality rate for legal abortion of 0.903 per 1000 procedures Deshmukh et al (1978). Since the interference was done at varying places outside, no true incidence of criminal abortion or its mortality rate can be computed. We are in agreement with Tietze and Bongaarts (1976) in this re-

The 'stick' method is the most common method used by quacks for bringing

about an abortion. This mode was used in almost half of our cases. Not only can the stick give rise to ascending infection but worse still it can injure the uterus and other intraperitoneal organs, making it a very dangerous procedure. The trend of the 'stick' method has not changed despite legalisation of abortion. Prior to legalisation this was the method of choice used in 17 of 23 cases as reported by Baxi et al (1971), from our institution. The other methods used in our series were intravaginal injections in 3 cases and high pressure douche in 1 case. These methods were not reported in the cases desnribed by Baxi et al (1971) and by Bhatt and Soni (1973). Use of various intra-amniotic solutions for legalised second trimester abortion has probably rekindled the interest of quacks in such techniques.

As regards age we had 17.7% teenagers—a figure higher than that of Philip and Ghouse (1976) who reported 9.93%. The majority of our cases i.e. 47.1% were in their third decades. This is in agreement with the data of Philip and Ghouse (1976) who report 44.78%.

Most of our patients were poorly educated. This is contrary to the data of

Koetsawang et al (1978) who report from Thailand that septic abortion cases are better educated than other abortion cases.

Out-of-wedlock pregnancy constitutes 52.9% of our cases while Bhatt and Soni (1973) report only 22.6% cases. Probably more of the married cases resort to legalised abortion now-a-days. This is indeed a welcome change in the trend. However, despite legalisation, out-of-wedlock pregnant patients still resort to criminal abortion.

The management of septic abortion has always been controversial. The debate is Almost conservatism versus surgery. half of our cases (47.1%) underwent surgery. Five underwent exploratory laparotomy. In 2 of the cases peritoneal toilet with drainage of pus was done. Both these cases died of sepsis more than 7 days following operation. In 1 case a total hysterectomy with right salpingooophorectomy was done in addition to drainage. She died on the fourth day of sepsis. The other 2 cases in this group had intestinal injury which required suturing in 1 and resection with anastomosis in the other. Both these patients died within 48 hours following surgery.

Two cases underwent blunt curettage

TABLE IV
Surgical Treatment

Surgery	No. of cases	Death After Surgery	Cause of Death
Exploratory laparotomy	mile berthard		
with drainage	2	>7 days	Sepsis
Exploratory laparotomy		· · · · · · · · · · · · · · · · · · ·	
with intestinal surgery	2	<48 hours	Sepsis with performative
Exploratory laparotomy	P THE THE		pertonitis
with hysterectomy	1	4 days	Sepsis
Blunt curettage	1	>7 days	Sepsis
Blunt curettage	1	<48 hours	Septic shock
Colpotomy with drainage	1	>7 days	Sepsis with uterine
and the later of the later		and Marian and	perforation
Total	8	_	- 1-1-1-1

of which one died of septic shock within 2 days whilst the other died 8 days later of sepsis. One patient underwent colpotomy with drainage of pus. This patient died 10 days later of sepsis. A postmortem examination revealed an old uterine perforation with peritontis. A left lung abscess was also present.

is in keeping with the low incidence of embolism elsewhere in our country.

That 17 women died as a result of illegal abortion despite the liberalisation of abortion is proof that the Medical Termination of Pregnancy Act of 1971 is no panacea to prevent criminal abortion. Criminal abortion is a major socio-

TABLE V
Conservative Treatment

Cause of Death	No. of Cases	Death after admn.
Tetanus	3	<48 hours
Tetanus	3	>7 days
Septic shock	1	<48 hours
Coagulopathy	1	<48 hours
Cardiac failure	1	<48 hours
Total	9	de-section of the section of the sec

Of the patients treated conservatively, 6 had tetanus and died despite intensive care. One patient had coagulopathy and bled to death despite resuscitative measures. At post-mortem examination the patient had hepatomegaly, subcutaneous haemorrhages and jaundice. A second patient had mitral valve disease at post-mortem examination and had died of cardiac failure and pulmonary oedema. The last patient in this group was hospitalized in a state of shock. She died of septic shock within 48 hours.

The trend of deaths from criminal abortion at our institution has remained more or less the same. Baxi et al (1971) reported 38.9% deaths due to tetanus. In our series the figure is 35.3%. Endotoxic shock, coagulopathy are the other common causes of death from criminal abortion. Embolism has surprisingly not figured in the causes of death neither in this nor in the series reported by Baxi et al (1971). Fox (1967) reporting on abortion deaths in California gives a high figure of 26% for embolism. This trend

economic problem worsened by illiteracy in our country. Russel (1967) states that the antidote to the ills of abortion is contraception. But in a country like ours even this antidote is not practicable because of traditional beliefs and customs and illiteracy. Impartion of sex and health education even at the village level may help to improve matters in this regard. We firmly believe that the ultimate aim should be to have "every pregnancy—a wanted pregnancy".

## Summary

- 1. Seventeen deaths occurred at the K.E.M. Hospital as a result of illegal abortion despite legalisation of abortion.
- 2. More and more married women are seeking legal abortion.
- 3. Tetanus and sepsis are the main causes of death in criminal abortions.
- 4. Vigorous treatment in a specialised centre is often necessary to reduce the mortality and morbidity as a result of criminal abortion.

5. Sex and health education and easily available contraceptives may help to further reduce the high incidence of illegal abortions.

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