Psychiatric sequelae of induced abortion

MARY GIBBONS, LRCPS, MRCGP

Stanley Thomas Johnson Foundation Research Fellow,
RCGP Manchester Research Unit

Introduction

THE joint RCGP/RCOG study of the sequelae of induced abortion is a continuing, large-scale, prospective survey which began in 1976.[1] One particular aim is to examine the psychiatric morbidity after the operation. A large amount of literature has been published on this subject, but considerable variation exists not only as a result of changes in the law in the countries concerned, but also in the methodology, analysis and interpretation of the studies. In this paper we attempt to identify and document the problems of comparative evaluation of the more recent studies, and to determine the current consensus, so that when the results from the joint study become available they can be viewed in a more informed context.

Changes in the abortion laws

The first definitive steps towards liberalization of the abortion laws were taken by Iceland (1935), Sweden (1937) and Denmark (1938).[2] Britain introduced new legislation on abortion in 1967.[2,3] In several other countries, gradual changes have meant that first trimester abortions are now available on request.[2,4-7] The legalization of abortion has provided more opportunities for studies of subsequent morbidity. New laws have also contributed to the changing attitudes of society, and the increasing acceptability of the operation has probably influenced the occurrence of psychiatric sequelae.

Interpretation of psychiatric sequelae

The complexity of measuring psychiatric sequelae is evident from the many terms used to describe symptomatology and behavioural patterns, and from the number of assessment techniques involved. The term 'psychiatric illness' hides a variety of symptoms.[8] These may be mild, commonly reported psychiatric problems such as guilt,[9,10] regret,[11] sleep disturbance,[10,12] self-reproach,[13] and aspects of personality (for example, sadomasochism[14] and adjustments in marital and interpersonal relationships)[10,15] but the term also encompasses severe forms of depression, mania and psychosis,[16,17] which often require admission to a psychiatric unit.

Numerous techniques have been used to quantify psychiatric sequelae. Some studies have used patient questionnaires,[18,19] general practitioner questionnaires,[10,20] or interviews by doctors, psychiatrists[9,11,21-23] and social workers.[24] Others have adopted a variety of psychological and personality tests, such as the Minnesota Multiphasic Personality Scale, Hamilton Rating Scale, and the Loevinger Family Problem Scale, used solely or in conjunction with interviews and questionnaires.[10,11,14,15,19,21,22,24-26]

Mild psychiatric illness

The conclusion that few psychiatric problems follow an induced abortion has been drawn by several authors.[11,15,18,22,27] Many studies, however, were deficient in methodology, material or length of follow-up.

In one study, few women experienced severe guilt, depression or religious problems after an abortion. These results were based on the responses to a questionnaire about depression, guilt, religious feelings, regret, birth control and the patient's view as to what was the worst part of the procedure. The last-mentioned was an open question and 36 replies to it were received out of 48; 12 women who did not reply specifically to this remarked that nothing about the abortion seemed particularly bad. The worst feature of the abortion was felt to be the wait beforehand. In this study, one sixth of the women waited more than two weeks for their first appointment at the clinic, and then about three quarters waited for more than two weeks for a bed. This resulted in a higher proportion of abortions by urea installation, a method now discontinued. Follow-up 14–18 months later was poor, with only 48 out of 102 abortion patients making a direct response. A further 10 patients wrote, telephoned or were contacted indirectly through relatives or others.[18]

Psychiatric evaluation

A British study in 1975 reported a favourable outcome for a 'representative sample' of 50 National Health Service patients: 68 per cent of these patients had an absence of or only mild feelings of guilt, loss or self-reproach, and considered abortion was the best solution to their problem. The 32 per cent who had an adverse outcome reported moderate to severe feelings of guilt, regret, loss and self-reproach and there was evidence of mental illness; in most of these cases the adverse out-

come was related to the patient's environment since the abortion. In this prospective study, details of interview, psychological tests and variables, such as civil status, age, social class and religion, were discussed and analysed. Psychiatric evaluation was made on the day before the operation and six months after the operation.[11]

In a short-term study of one month, no feelings of guilt were reported by 7 per cent of 250 patients followed up after an abortion; 78 per cent of the women were happy with their decision.[27]

In a study of 360 women who had all had pre-abortion counselling, there was a significant improvement of psychiatric symptoms such as guilt feelings, interpersonal and sexual adjustment. Data in this study was collected by detailed structured interviews and psychological tests. At a three month follow-up, 91 per cent of patients were traced, but at final follow-up 15 months to two years later only 60 per cent (217) of patients could be traced. This was partly due to the fact that many patients had come to London for the abortion from other parts of the country or from outside the UK.[15]

The effects of previous psychiatric illness

Some studies have reported that abortion patients are more likely to have a history of previous psychiatric illness or a vulnerable personality when compared with maternity patients.[1,26] It might be assumed that these women would have a poor psychiatric prognosis. However, a follow-up study of 126 women, which compared the overall reaction to therapeutic abortion between women with a history of previous mild psychiatric illness and those without, reported that a significantly different emotional reaction could not be demonstrated between the two groups—96 per cent of the psychiatric group and 92 per cent of the nonpsychiatric group said that their emotional health was better or normal following the abortion.[12]

A Scottish study in 1973[22] found that women who had had abortions were no more depressed than women who had continued their pregnancy, despite the fact that the former group had been significantly more depressed at referral and had displayed more vulnerable personality traits. Both groups had improved psychologically since referral, but the abortion group showed the greatest change.

In another study, 50 women, who were mostly Jewish, white, married and private patients, were followed up for three to six months; 25 had had abortions because of psychiatric illness and 25 for nonpsychiatric reasons, mainly rubella. Mild guilt, with or without associated mild and brief depressions, was reported in 20 per cent of subjects. Only one woman in the psychiatric group had this depression in contrast to nine (36 per cent) of the nonpsychiatric group. The symptoms were usually self-limiting and required no treatment. Of those women whose pregnancies were terminated for psychiatric reasons, 96 per cent did not want the baby compared with 40 per cent in the other group.[23]

Late abortion

In a pilot study of 40 women having midtrimester abortions in non-NHS clinics by either intra- or extra-amniotic prostaglandin, 25 patients were followed up for a minimum period of three months. Five reported mild depression, but none required specialist advice and only one patient had time off work or school for this reason. The causes of late abortion in this sample were discussed. In only 14 patients was an unrealistic attitude to the possibility of pregnancy an important cause.[28]

Comparison of psychiatric and nonpsychiatric referrals

In a survey among women seeking an abortion, 271 who were referred for a psychiatric opinion regarding termination of pregnancy were compared with 82 patients referred direct to a gynaecological department; 250 patients in the psychiatric group and 71 in the gynaecological group were followed up. Assessments of the mental state were compared on referral and at follow-up one to three years later. Termination had been recommended for 130 of the 250 women in the psychiatric series, and 128 had the operation. Of the 71 women in the gynaecological series, 22 were recommended for termination and all of them had the operation. In both series, the women who were refused an abortion were also followed up. In the psychiatric series, only two women had regrets and in both cases the terminations had largely been on account of the husband's illness. In the gynaecological series, nine out of the 22 patients had depressive remorse; seven of these had had an abortion on organic grounds and the other two had been opposed to termination. In both series the finding was that termination caused little psychiatric disturbance provided the patient wanted an abortion.[9]

Methods of termination

Two of the methods used for termination of midtrimester abortion have been compared in another small study in which 27 women who had an abortion under general anaesthesia by dilation and evacuation (D and E) and 17 who had an amniotic procedure were followed up. The patients who had an amniotic termination were those who were judged to be too far advanced for the D and E method, or were patients of physicians who did not use this procedure. The D and E group had a smoother psychological course; patients who had amniotic terminations experienced more depression and anger after their abortion.[29]

Severe psychiatric illness

Cases of serious psychiatric outcome in the form of psychosis, severe depression and schizophrenia have been reported.[16,17,30,31]

Brewer's British study[16] reported that postabortion psychosis (0.3 per 1,000 abortions) was considerably lower than puerperal psychosis (1.7 per 1,000 deliveries). Jansson's Swedish study[17] reported an incidence of postabortion psychosis (19.2 per 1,000 abortions) and puerperal psychosis (6.8 per 1,000 deliveries). Brewer felt that psychological changes are probably more profound after childbirth and may be responsible for higher puerperal psychosis. The methods used in both studies were similar in that all women admitted to psychiatric hospitals in the area, within a given period, after a termination or a pregnancy, were related to the total number of abortions and births, respectively, in their catchment area. These methods facilitated the study of large populations. Brewer suggests that the lower incidence of postabortion psychosis in his study might be due to such factors as a lower incidence of previous psychiatric illness than in Jansson's study group and differing attitudes to abortion in the two countries. Jansson's study was carried out in 1952–56 and Brewer's in 1975–76.

In a Danish study, the incidence of postabortion psychiatric admission was 1.84 per 1,000 compared with 1.2 per 1,000 postdelivery.[32]

Risk factors

Attempts have been made to identify factors which might influence adverse effects after an abortion. Ambivalence towards the abortion, coercion, medical indications for abortion, a history of psychiatric illness, and unsupportive attitudes of family and professionals have all been associated with unfavourable psychiatric sequelae.[10,11,19,33]

In a study of women interviewed before abortion and followed up at eight weeks and eight-month intervals, guilt was found to be more common among women with physical grounds for abortion. Significant relationships were shown between ambivalence, regret and nervous symptoms on the one hand, and previous psychiatric vulnerability on the other. This supports the hypothesis that women with a history of emotional instability are more at risk after induced abortion than other women.[10]

In a further study, an increased risk of postabortion psychiatric illness was noted when any of the following factors were present: ambivalence, coercion, medical indications, concomitant psychiatric illness and the woman's feelings that her decision was not her own. The case histories of four women with postabortion psychiatric symptoms, said to be drawn from a group of more than 500 terminations, were reported as illustrating the effect of these risk factors.[33]

A British group, reporting on 50 patients followed up for six months after abortion, devised a scale for predicting risk. Categories such as desertion by a partner, the 20- to 30-year age group, foreign birth, multiparity, history of psychiatric illness, present psychiatric illness and ambivalence to termination were statistically significant in identifying women who would have an adverse outcome.[11] The perceived amount of support from her partner, parents and friends was claimed to be the most important determinant of a woman's psychological reaction to abortion. Opposition to her abortion decision resulted in significantly higher levels of anxiety, depression and hostility.

Effects of refused abortion

The outcome for women who were refused an abortion and the effects on the children born as a result have been discussed in a number of studies.[9,18,34,35,37,38]

In one survey, 24 per cent of 249 women who were refused abortion were significantly disturbed after 18 months; 31 per cent considered themselves dissatisfied and poorly adjusted; 7 per cent were certified as unfit to work after 18 months, rising to 13 per cent later on. Thirty-one per cent of these mothers were judged to be providing a notably unfavourable environment for their children. Forty per cent of the women in this study had sought abortion for psychiatric reasons. Psychiatric complications were four times more frequent in these women than in the women granted abortion.[34] Other studies of refused abortion have reported that some of the women obtained an illegal abortion, or a legal abortion elsewhere.[34-38]

Thus, it cannot be assumed that the residual group continuing the pregnancy is a representative sample of the initial study population.[39]

Another group of workers investigated 120 children born after application for abortion had been refused. Documentary evidence was obtained from civil and ecclesiastical registry offices, social agencies, school authorities and psychiatric inpatient and outpatient departments. They were compared with a control group of children, which comprised children of the same sex born in the same hospital; both groups were followed up for 21 years. The unwanted children were more likely to exhibit antisocial and criminal behaviour, needed more public assistance and were below average in educational achievement. There was a greater frequency of factors tending to disrupt the stability of the home in the case of the unwanted children, such as birth out of wedlock (26.7 per cent compared with 7.5 per cent for controls) and death or divorce of their parents while they were still young.

Role of counselling

The value of counselling in the abortion decision has been commented on in many studies.[15,21,22,40-44] It was a strong belief that an initial careful assessment and supportive attitude towards the patient, whatever her decision, leads to a beneficial outcome. However, few comparison studies have actually evaluated abortion counselling.[44] Further research is required to assess the

merits of counselling, to identify the person most suitable for the role of abortion counsellor and to select the ideal place for counselling.

Role of the psychiatrist

A large amount of previously reported research on the psychiatric indications of abortion may be unreliable. This is due to the fact that women seeking abortions on mainly social grounds used to have to show psychiatric disturbance in order for the abortion to be legally acceptable.[8] Psychiatrists were frequently involved in this decision-making. Since the liberalization of abortion laws, the number of patients seen by psychiatrists has fallen sharply, and it has been claimed that there is now little provision for careful pre- and postoperative psychiatric assessment.[11] In 1973[12] it was predicted that the major role of the psychiatrist would change to that of an occasional consultation from colleagues in obstetrics in order to evaluate possible psychiatric contraindications to the performance of an abortion and this is now becoming a reality.

Discussion

In studying the psychiatric sequelae of induced abortion, two main methods have been employed. The first type of study makes use of routine pre-and postabortion screening measures in the form of questionnaires,[18] interviews[9,23] and psychological rating scales.[11,15,19] The number and variety of these instruments suggests that no ideal has been agreed: in many reports the numbers were too small for reliable analysis; comparison groups were not available; important confounding factors, for example previous psychiatric history, were not adequately taken into account; many studies were of short duration.

In the second type of study, information about reported pre- and postabortion psychiatric illness was obtained from doctors' or psychiatrists' records of actual consultations. The advantage of this method is that large populations can be observed and cohorts can be compared prospectively over long periods of time. The larger numbers facilitate the evaluation of other confounding variables such as age, social class and parity. This is the method adopted in the present joint RCGP/RCOG study.

In a strictly controlled scientific study, women would have been assigned at random to the abortion or pregnancy continuation groups. However, this is ethically impossible. In many studies control groups were not even considered and, where they were, they varied between women who had had a spontaneous abortion, women who continued a planned pregnancy and women who continued an unplanned pregnancy. The RCGP/RCOG study has used this latter comparison group and compared the subsequent health of a group of women presenting to their general practitioner and having an induced abortion with that of a control group of women presenting to the same doctors, again with an unplanned pregnancy, whose pregnancy was not terminated by an induced abortion.

Attitudes to abortion have been influenced by culture, religion and time. Much of the earlier literature,[45] which often included illegal abortions in their study groups, is not applicable in today's social climate. In more recent studies where abortion laws are more unified, problems identified in previous reviews,[8,45,46] such as variation in methodology, analysis and interpretation, still exist, but it would seem from this review that psychiatric sequelae are uncommon and shortlived. The size and design of the current joint RCGP/RCOG study should resolve some of the problems of existing data and provide more definitive evidence than in the past.

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Acknowledgements

I thank Professor David P. Goldberg, Department of Psychiatry, University Hospital of South Manchester, and the Directors of the Royal College of General Practitioners' Manchester Research Unit—Dr Clifford R. Kay, Dr Peter I. Frank and Miss Sally J. Wingrave—for their assistance in the preparation of this paper.

Address for correspondence

Dr Peter Frank, RCGP Manchester Research Unit, 8 Barlow Moor Road, Manchester M20 0TR.