

PSYCHOLOGICAL SEQUELAE OF ABORTION

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A review of some of the major modern studies on the psychiatric sequelae of abortion covering the areas of the effect on the woman when abortion is granted, and the effect on both the woman and the child when it is denied. Methodological problems associated with this research are discussed.

The recent decision of the Clinical Division of the New Zealand Psychological Society to make submissions to the Royal Commission on Contraception, Sterilisation and Abortion was against the wishes of some psychologists who considered this as a moral problem about which psychologists had no specialised knowledge, a view similar to that expressed by Simms (1967) that "psychiatric pronouncements in this field are often sophisticated rationalisations of particular moral or religious attitudes".

The steady stream of studies which have appeared since the 1930's indicates that this is indeed a field in which psychologists should be more deeply involved. Methodological problems exist which invalidate some studies and create difficulty in comparing others, a difficulty which leads to "opinion which ranges from the view that abortion is always followed by feelings of regret, loss and depression, to the opposite view that abortion results in feelings of obvious emotional relief" (Illsley and Hall, 1973).

Methodological Problems

1. The establishment of an adequate control group is largely ignored in the research because of the difficulty of determining an appropriate comparison. Should the emotional impact of induced abortion be compared with that of spontaneous abortion, of term delivery, of term delivery followed by adoption, or even with the absence of pregnancy? Should women in the control group be randomly selected or matched with characteristics of those in the abortion group? With rare exception, the issues of research methodology and value judgments raised by these questions are overlooked.
2. Problems of definition and measurement weaken a great number of studies. Results are expressed in such terms as "adverse reaction", "mild approach", "normal transient depression", "severe guilt", "repressing guilt", "much smiling", "much crying", "relief", "indifference", "seeing a psychiatrist", "being in therapy", "happy", "impaired mental health". These vague, ill-defined terms are clearly inadequate for scientific research.

3. A major difficulty in this field is the changing legal status of abortion over the past 50 years when studies have appeared. To separate the psychological effects of abortion from those resulting from the current legal and moral standards of the culture is a complex problem. Abortion carried out under conservative legislation before the mid-1960's was conducted in a different social climate from that which currently exists in New Zealand. "The restrictions placed on the availability of abortion were compounded by the stresses on the woman seeking a legal abortion—social stigma, uncertainty as to whether the abortion could be obtained, ethical doubts, insensitivity and even contempt from hospital staff, and the play-acting sometimes necessary to obtain psychiatric approval for the abortion" (Institute of Medicine Report, 1975).

4. Other deficiencies found in many studies include failure to distinguish between legal, illegal and spontaneous abortion, failure to examine the emotional state of the woman before as well as after the abortion, poor sampling techniques, follow-up, for instance, of only a small percentage of the sample, lack of attention to interviewer bias, different lengths of time between the abortion and follow-up interviews, attention to only a few of those variables seen as relevant, namely age, marital status and subsequent relationship to the male partner, presence or absence of concomitant sterilisation, period of gestation, religion, degree of urbanisation and socio-economic status. Seldom are more than a few of these factors considered in a single study.

Early Studies of Psychological Effects of Legal Abortion

Simon and Senturia (1966) reviewed the 25 major studies published between 1934 and 1965 to establish not only what had been done in this field, but also to examine the validity of the research designs and the associated conclusions. They note: "it is sobering to observe the ease with which reports can be embedded in the literature, quoted and requoted many times without consideration for the data in the original paper. Deeply held personal convictions frequently seem to outweigh the importance of data, especially when conclusions are drawn". It is even more sobering to note, despite this comment in the major review of earlier studies, that modern authors are still not referring to the original papers but accepting the conclusions other reviewers care to make.

Simon and Senturia also conclude from their review that "there is some agreement that women with diagnosed psychiatric illness prior to abortion continue to have difficulty following abortion". They suggest the quality of the early data limits any further analysis and conclusions, but they outline those variables which should be considered in any subsequent studies. Even if, however, these early studies had conclusively shown adverse emotional sequelae to abortion, their relevance to modern studies from countries where legal abortion is now more readily available and socially acceptable would be doubtful.

Recent Research on Psychological Effects of Legal Abortion

To give some perspective to current research, it is useful to consider certain points and figures established by Fleck (1970), who draws attention to the failure to compare post-abortion reaction with "post-partum blues . . . a well-known, almost universal occurrence", and adds that "abortion, like every surgical operation, every inroad on a person's body, has psychological elements or sequelae which may leave psychological scars".

Three Scandinavian studies, although from the mid-1950's, illustrate the difficulty of making comparisons even between countries with a similar culture but where abortion laws are different. In Norway, where the law was liberal and social indications were frequently used for abortion, Brekke (1958) studied 34 post-abortion patients and found that only two showed a "slight reaction", a feeling of stress which lasted only a few days and then disappeared. Kolstad (1957) followed up 135 women from a sample of 968 aborted between 1940 and 1953, also in Norway, and found three to sixteen years later that 83 percent were happy with no reservations, and only 3.7 percent felt repentant. Both these studies suffer from the methodological problems cited earlier, but nevertheless show a lower rate of disturbance from that noted by Ekblad (1955), who followed up 479 Swedish women legally aborted three to four years previously on psychiatric grounds. Abortion at this time was legal in Sweden only on medical grounds. Ekblad's sample was atypical in that 58 percent suffered from chronic neurosis before pregnancy and had disturbed marriages. He found that 65 percent were satisfied with no self-reproaches, 10 percent had no self-reproaches but felt the operation was unpleasant, 14 percent had mild self-reproaches and 11 percent had serious self-reproaches or regretted the operation. This is a considerably higher percentage than in the two Norwegian studies. From a psychiatric point of view, however, the symptoms of the 11 percent who had serious self-reproaches were considered mild, and in only 1 percent was ability for further work impaired. Guilt was greater, Ekblad found, in those women who had been influenced by other people in their decision to seek an abortion. He concludes, "the greater the psychiatric indications for abortion, the greater is the risk of adverse sequelae".

Recent major studies in the United States since abortion laws became less restrictive in the late 1960's overcome some of the methodological problems in research in this field and yield valuable data. Sixty-six institutions involved in the Joint Programme for the Study of Abortion between July 1 1970 and June 30 1971 reported a total of 16 major psychiatric complications following 72,988 abortions. These included five depressive reactions associated with major haemorrhage or protracted fever, and two suicides, one of a woman with a history of psychiatric hospitalisation before and after the abortion. In this case it was clear that abortion itself was not the cause of the suicide. This

gives a psychiatric complication rate of 0.2 to 0.4 per 1,000 abortions (Tietze and Lewitt, 1972). To allow a comparison to be made, the rate of post-partum psychosis requiring hospitalisation in the United States is 1 to 2 per thousand deliveries.

A study which fails to use a control group, but which does attempt to use objective measures of psychological disturbance is that of Levene and Rigney (1970). A small sample of 80 percent of the original 70 patients in the study completed the Depression Rating Scale and the Multiple Affect Adjective Check List and made a brief statement about overall reaction to the procedure immediately following the abortion and three to five months later. These results were compared with those obtained during the psychiatric evaluation prior to the abortion, and showed that pre-abortion depression was significantly reduced for the great majority of women at follow-up as compared with the immediate pre- and post-operative condition. There were no reports of psychiatric hospitalisation for this group and although five reported they had seen a psychiatrist since the abortion two had been in therapy prior to becoming pregnant. The brief interval between abortion and follow-up limits this study. Margolis, Davison, Manson, Loos, and Mikkelsen (1971) compared 36 pre- and post-abortion profiles obtained on the Minnesota Multiphasic Personality Inventory in conjunction with the required psychiatric evaluation under the relatively restrictive Californian law of abortion on grounds of physical or mental health (this also applies to the Levene and Rigney study). Three to six months later 15 of the 27 pre-abortion abnormal profiles (elevated on Depression, Psychopathic Deviation and Schizophrenia) had become "normal". Margolis *et al.*, like Levene and Rigney, conclude that abortion does not aggravate mental illness or necessarily have a negative impact.

The results of both these studies must be viewed cautiously. They do not use a control group, they rely partly on self-reports for their results, they do not distinguish between the gestation period, the type of abortion, and those women who were also sterilised; and the law under which the abortions were performed might lead to the deliberate exaggeration of pre-abortion psychiatric symptoms.

Barnes, Cohen, Stoekle, and McGuire (1971), Niswander and Patterson (1967) and Patt, Rappaport, and Barglow (1969) are often quoted, but all contain various methodological shortcomings, for example absence of a control group on accurate pre-abortion data, and lack of standardised follow-up measure. They all show general agreement, however, that while abortion may elicit feelings of guilt, regret or loss in some women, these reactions tends to be temporary and appear to be outweighed by positive life changes and feelings of relief. Although abortion may be followed by some minor negative feelings, major psychiatric trauma is essentially non-existent.

One of the better studies to date is that of Athanasiou (1973). They studied three matched groups totalling 114 women, one group planning term deliveries, one obtaining first trimester suction curettage

abortions, and the third obtaining second trimester saline abortions. Detailed interviews and several standardised questionnaires were given during the pregnancy and again a year after the abortion or delivery. The only statistically significant difference between the three groups occurred on the Paranoia Scale of the MMPI with term birth patients having elevated scores. Athanasiou states, "if any conclusions were to be drawn . . . it would be that early abortion by suction curettage was possibly more therapeutic (with respect to this indicator) than carrying pregnancy to term".

A good instance of how biased conclusions creep into the literature comes from the work of Brody, Meikle, and Gerritse (1971). Moore-Cavar (1974) states, "One particularly striking example of an attempt to approach the issue "scientifically" comes from Canada. One hundred and seventeen women applying for legal abortions were each given seven psychological tests:

1. The Minnesota Multiphasic Personality Inventory (556 items);
2. a Pregnancy Research Questionnaire (174 items);
3. the Minnesota-Briggs Social History (169 items);
4. the Mooney Problem Check List (288 items);
5. the Cornell Medical Index (195 items);
6. the Forer Sentence Completion Test (100 items); and
7. The Semantic Differential (6 concepts).

The results of the tests, according to the authors, were *not* used for the hospital committee decisions but one cannot help but wonder if all subjects were entirely convinced that that was the case".

The abstract of the actual article states: "The emotional reactions of 117 women applying for therapeutic abortion showed a marked degree of disturbance compared to those of a control group in the same stage of pregnancy. Response to the abortion was rapid, positive and lasting". Without further investigation one is seized with enthusiasm over the methodology—a control group, and measures on seven psychometric tests. Bearing in mind that abortion can be obtained in Canada on the grounds of the woman's life or health being endangered by the pregnancy, inspection of the paper shows that the battery of tests was completed before the applicant was seen by the Committee. Results are then presented from the MMPI profiles alone. Brody *et al.*, state that the differences between all the clinical scales (except *Mf*) of the applicants and controls are highly significant ($p < 0.01$) and that differences between the pre-committee and six weeks post-abortion testing are again significant ($p < 0.01$). No comment is made about the high *F* scale, known to be elevated in subjects "who are specifically motivated to appear inadequate, incompetent, or psychiatrically involved" (Dahlstrom and Welsh, 1960) except in general terms "that examination of the individual test results suggests that while there may have been some tendency to exaggerate existing symptoms there

was no systematic attempt to fake on the part of the applicants as a whole". Further consternation arises on realising that the control group is far from matched, and it becomes obvious that the conclusions drawn from this "scientific approach" are biased, inaccurate, and inadequate.

Most of the British work suffers from the same methodological problems noted in the American studies. Clark, Forstner, Pond, and Tredgold (1968) found 108 of 120 women were wholly satisfied six months after the abortion (and in only one case had the psychiatric condition deteriorated), Pare and Raven (1970) found little psychiatric disturbance in 128 women terminated 1-3 years previously, Todd (1972) had similar figures to Clark's, provided the patient wanted the abortion, Emery and Lavin (1973) reported overall results after termination were significantly better than those after completion of the pregnancy, and Horobin (1973) states, "few severe depressive reactions were evident in (a sample of 370) aborted women . . . though moderate degrees of depression were not uncommon. These depressive states appear to be frequently related to current marital or other external stresses or personality factors rather than the fact of abortion."

Lask (1975) used some standardised measures in a follow-up study of 44 women aborted under the National Health Service. The day before the abortion and six months later he took a personal history, a past medical and psychiatric history, and assessed current mental state. In addition, he administered the Hamilton Modified Rating Scale for depressive states, the Zung Self-Rating Scale, and the Eysenck Personality Inventory. In 68 percent the outcome was favourable, using criteria related to the above measures, and unfavourable for 32 percent. Eighty-four percent had no regrets about the termination, and the psychiatric status was improved or unchanged in 89 percent, that is, in all but four cases. Lask commented that, "in only four cases could the adverse result be directly related to the termination, rather than to the patient's environment since the operation. . . . Where there is a risk of adverse sequelae to termination, there will be an equal risk of adverse sequelae to continued pregnancy; in particular when a pregnant woman requests termination because of environmental stress factors these factors will still be present should termination be refused. The adverse sequelae of refused termination will affect not only the woman and any family but also the unborn child".

The importance of factors other than those associated with the actual termination is again shown in a study by Blumberg, Goldus, and Hanson (1975), in which 13 families were assessed after the woman had undergone abortion following prenatal diagnosis of a genetic defect in the foetus. Results from the MMPI and psychiatric interview suggest the incidence of depression may be as high as among 92 percent of the women and 82 percent of the men and can perhaps be related to "the sense of guilt and shame associated with carrying genetic disease". Four of the 13 families separated during the pregnancy-abortion period

and because of the time needed for cell culture and analysis abortion was delayed until the 18th week.

Little has been done on the psychological, sociological and cultural factors leading to the decision to seek abortion in the second trimester rather than the first, but Kaltreider (1973) found that women aborted in the second trimester spoke of the terminations in such terms as "labour", "delivery" or "childbirth" and referred to the "baby" or "child" rather than the "foetus" or the "pregnancy", terms used by the first trimester group. The second trimester group also experienced a more marked mourning period. Kerenyi, Glascock, and Horowitz (1973) found that women obtaining second trimester abortions were younger, less well-educated, more frequently single, unemployed and students than women obtaining first trimester terminations and suggests denial and ambivalence towards the pregnancy in this group. Although the data are limited it appears that where legal abortions can be readily obtained in the first trimester there is a lesser risk of adverse sequelae. It is unfortunate that under less liberal abortion laws there is likely to be a greater delay, particularly for those less equipped both intellectually and emotionally to seek the necessary medical care, resulting in abortions being performed in the second trimester, a period in which mortality and morbidity risks are higher.

General Conclusions

Osofsky, Osofsky, and Rajan (1973) conclude from their review of recent studies, "For most women abortion has had few, if any (negative), psychological sequelae. In the limited number of cases where feelings of guilt or depression have been present, they have tended to be mild and transient in nature. On the whole, the experience has led to further emotional maturation and resolution of conflict. In the rare instances where psychiatric disturbances have been noted post-abortion, they have appeared related to existing psychopathology rather than to the procedure".

Abortion Denied

In the space of this review it is not possible to consider the emotional impact of adoption on either the mother or the child, or of the unwanted child on a family in those cases where abortion is denied.

Six British studies published between 1970 and 1973 show the objective outcome of refusal of abortion under the National Health Service on 512 women (Report of the Committee on the Working of the Abortion Act, 1974). Over one third eventually aborted, either legally, illegally or spontaneously. Under two thirds continued to term and one quarter of these had the baby adopted or fostered. Only one third of the single women kept the child themselves. Pare and Raven (1970) found that of 120 women who were refused termination only 49 percent continued the pregnancy and eventually kept the baby. One third regretted that termination had not been carried out, and many

admitted to feelings of resentment towards the child, and Horobin (1973) concluded that "regrets about continuing with the pregnancy were more common than regrets about abortion".

Höök (1963) followed up 274 Swedish women refused abortion 7½ to 12 years previously and found 24 obtained abortion because of subsequent symptoms. Of those who went to term one quarter accepted the pregnancy and handled the situation satisfactorily, half finally adjusted after a variety of insufficiency reactions during an 18-month observation period, and one quarter still had, at follow-up, those symptoms of insufficiency which arose in the eighteen months post-refusal period. A higher percentage of incapacitating insufficiency was noted among the supposedly healthy women who did not qualify for abortion than among the emotionally and physically disturbed individuals who did qualify.

Illsley and Hall (1972) conclude from the studies in this area that "although many women who are refused abortions do adjust to their situation and grow to love the child, about half would have preferred an abortion, a large minority suffer considerable distress, and a small minority eventually suffer severe disturbance".

In assessing the psychological impact of continuing unwanted pregnancies it must be noted that, as under current New Zealand law, the majority of women most at risk will be granted termination on psychiatric grounds. Those who go to term will be judged the more stable.

Forssman and Thuwe (1966), often criticised for the major social and economic differences between their experimental and control groups of children and their mothers, in fact, corrected for these differences in the analysis of their data. They found that 120 children born to Swedish women refused legal abortions, compared with 120 wanted children, were brought up under more difficult social conditions which could be expected to lead to insecurity in childhood, for example, more were placed in foster or children's homes or were brought up by a solo parent (either through death, divorce, or never having married). In adolescence the unwanted children showed far greater disturbance welfare assistance. It is obvious that the unwanted children were as assessed by delinquency and criminal behaviour, psychiatric and disadvantaged throughout childhood and in adolescence showed greater disturbance. Dytrych, Matejcek, Schuller, David, and Friedman (1974) collected data on the first seven to nine years of approximately 200 children born to Czech women who applied for abortion on non-medical grounds and were twice refused, compared with 200 children whose mothers had discontinued contraception to conceive. They were matched on school grades, sex, birth order, number of siblings, mother's marital status and father's occupation. "A large variety of medical, social and psychological data are being accumulated", (Moore-Cavar, 1974), and although the initial differences are not dramatic, they do suggest "unwanted" boys in particular, now entering adolescence suffer

a greater incidence of illness, have poorer grades at school, have more difficulty with peer group relationships and are at seemingly greater risk for future delinquency.

Summary

There is no painless way of ending any pregnancy, whether the pain is physical or psychological, whether the pregnancy is carried to term or terminated, whether it is wanted or unwanted.

It is obvious that despite major methodological problems in research design, legal abortion has few serious psychological sequelae. "To those distressed by unwanted pregnancy abortion usually brings quick, substantial and lasting relief. Feelings of regret, self-reproach and guilt . . . are usually mild and transient. Therapeutic abortion has little influence, for good or ill, upon the course of an existing serious mental illness; in those who are temporarily unstable continuation of an unwanted pregnancy is more likely to have adverse effects than is therapeutic abortion; and significant psychiatric sequelae of abortion (and of refusal of abortion) are more likely in those who have been temporarily unstable prior to the pregnancy. The clearer the psychiatric indications for abortion the more probable it is that psychiatric disturbance will also occur after abortion" (Report of the Committee on the Working of the Abortion Act 1974). This disturbance may be related to factors in the woman's environment rather than to the abortion itself. Emotional distress is more likely in the second trimester of abortion. Continuing an unwanted pregnancy may have adverse psychological sequelae for both the mother and the child. With ten million legal abortions being performed in the world in a year, if severe psychological sequelae resulted, surely they would be documented.

In conclusion, Kummer's (1963) suggestion that "the whole concept of post-abortion psychiatric illness is a myth" is echoed by Fingerer (1973): "Psychological after-effects of abortion seem to reside in psychoanalytic theory and societal myth."

REFERENCES

- Athanasίου, R. Psychiatric sequelae to term birth and induced early and late abortion: A longitudinal study. *Family Planning Perspectives*, 1973, 5, 227-231.
- Barnes, A. B., Cohen, E., Stoeckle, J. D., and McGuire, M. T. Therapeutic abortion: Medical and social sequels. *Annals of Internal Medicine*, 1971, 75, 881-886.
- Blumberg, B., Goldus, M., and Hanson, K. The psychological sequelae of abortion performed for a genetic indication. *American Journal of Obstetrics and Gynecology*, 1975, 122, 799-808.
- Brekke, B. Other aspects of the abortion problem. In Calderone, M. (Ed.), *Abortion in the United States*. New York: Harper and Row, 1958.
- Brody, H., Meikle, S., and Gerritse, R. Therapeutic abortion: A prospective study. 1. *American Journal of Obstetrics and Gynecology*, 1971, 109, 347-353.

- Clark, M., Forstner, I., Pond, D. A., and Tredgold, R. F. Sequels of unwanted pregnancy. *Lancet*, 1968, 2, 501-503.
- Committee on the working of the Abortion Act. Report of the Committee, London: Her Majesty's Stationary Office, 1974.
- Dahlstrom, W. G. and Welsh, G. S. *An M.M.P.I. handbook*. Minneapolis: University of Minnesota Press, 1960.
- Dytrych, Z., Matejcek, Z., Schuller, V., David, H., and Friedman, H. Children born to women denied abortion; Initial findings of a matched control study in Prague, Czechoslovakia. *Family Planning Digest*, 1974, 3, 10.
- Ekblad, N. Induced abortion on psychiatric grounds. *Acta Psychiatrica Scandinavica*, 1955. Suppl. 99.
- Emery, R. and Lavin, N. *Outcome of unwanted pregnancies. Memorandum to the Lane Committee*. Her Majesty's Stationary Office, 1974.
- Fingerer, M. Psychological sequelae of abortion: Anxiety and depression. *Journal of Community Psychology*, 1973, 1, 221-225.
- Fleck, S. Some psychiatric aspects of abortion. *Journal of Nervous and Mental Disease*, 1970, 151, 42-50.
- Forssman, H., and Thuwe, I. One hundred and twenty children born after therapeutic abortion refused. *Acta Psychiatrica Scandinavica*, 1966, 42, 71-78. (Original version in *Nordisk Psykiatrisk Tidsskrift*, 1960, 14, 265-279.)
- Höök, K. Refused abortion: A follow-up study of 249 women whose applications were refused by the National Board of Health in Sweden. *Acta Psychiatrica et Neurologica Scandinavica*, 1963, 168.
- Horobin, G. *Experience with abortion: A case study of North-East Scotland*. Cambridge: University Press, 1973.
- Illsley, R., and Hall, M. H. Psycho-social aspects of abortion: A review of issues and needed research. Aberdeen, Scotland, 1973 (Mimeographed).
- Institute of Medicine. *Legalised abortion and the public health*. Washington D.C.: National Academy of Science, 1965.
- Kaltreider, N. Psychological factors in mid-timester abortion. *Psychiatry in Medicine*, 1973, 4, 132-133.
- Kerenyi, T. D., Glascock, E., and Horowitz, M. Reasons for delayed abortion: Results of four hundred interviews. *American Journal of Obstetrics and Gynecology*, 1973, 117, 299-304.
- Kolstad, P. Therapeutic abortion. *Acta Obstetrica Gynecologica Scandinavica*, 1957, Suppl. 6: 36.
- Kummer, J. Post-abortion psychiatric illness—a myth? *American Journal of Psychiatry*, 1963, 119, 980-983.
- Lask, B. Short-term psychiatric sequelae to therapeutic termination of pregnancy. *British Journal of Psychiatry*, 1975, 126, 173-177.
- Levene, H., and Rigney, F. Law, preventive psychiatry and therapeutic abortion. *Journal of Nervous and Mental Disease*, 1970, 151, 51-59.
- Margolis, A. J., Davison, L. A., Hanson, K. H., Loos, S. A., and Mikkelsen, C. M. Therapeutic abortion follow-up study. *American Journal of Obstetrics and Gynecology*, 1971, 110, 243-247.
- Moore-Cavar, E. *International inventory of information on induced abortion*. New York: International Institute for the Study of Reproduction, Columbia University, 1974.
- Niswander, K. R., and Patterson, R. J. Psychologic reaction to therapeutic abortion. *Obstetrics and Gynecology*, 1967, 29, 702-706.
- Osofsky, J., Osofsky, H., and Rajan, R. Psychological effects of legal abortion: With emphasis upon immediate reactions and follow-up. In M. Osofsky, and J. Osofsky, *The abortion experience*. Hagerstown, Maryland: Harper and Row, 1973.

- Pare, C., and Raven, H. Psychiatric sequelae to therapeutic abortion. *Lancet*, 1970, 1, 635-637.
- Patt, S., Pappaport, R., and Barglow, P. Follow-up of therapeutic abortion. *Archives of General Psychiatry*, 1969, 20, 408-414.
- Simms, M. The ethical foundations of psychiatric opinion on abortion. *Medical Gynaecology and Sociology*, 1967, 2, 6-8.
- Simon, N., and Senturia, A. Psychiatric sequelae of abortion. *Archives of General Psychiatry*, 1966, 15, 378-389.
- Tietze, C., and Lewit, S. Joint program for the study of abortion (J.P.S.A.): Early medical complications of legal abortion. *Studies in Family Planning*, 1972, 3, 109.
- Todd, N. A. Follow-up of patients recommended for therapeutic abortion. *British Journal of Psychiatry*, 1972, 120, 645-649.