AN EXPLORATORY STUDY TO IDENTIFY PRECONCEPTION CONTRACEPTIVE PATTERNS OF ABORTION PATIENTS

by

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ABSTRACT

AN EXPLORATORY STUDY TO IDENTIFY PRECONCEPTION CONTRACEPTIVE PATTERNS OF ABORTION PATIENTS

Judith Mary E. Watts

The purpose of this study was to add to the understanding of problems with contraceptive utilization by describing contraceptive practices, attitudes, and knowledge of abortion patients. Women having abortions were selected as subjects because of their apparent contraception difficulties. The study was considered of value to nurses who are in a good position to provide contraception services to people.

Thirty subjects were randomly selected from patients having D & C/aspiration abortions as in-patients in a large urban British Columbia hospital. Data were gathered using a semi-structured questionnaire in a single interview held the evening before the abortion.

A large amount of data were gathered on contraceptive utilization of which the following items are of particular interest.

1) The women having abortions to deal with unwanted pregnancies were a widely varied group in terms of age, marital status, education, and occupation. The largest number were in their 20's and many (over half) had stable relations with their sexual partners.

2) Almost all subjects had used contraceptives at some time and many (over half) used them at the time of conception of the pregnancy being aborted. Five of the subjects experienced contraceptive failure with IUD's.

3) Many subjects indicated ambivalence about the use of and responsibility for contraception. They frequently wished to share responsibility for choosing contraceptives with their partners but often did not do so.

4) Most subjects were not well informed about contraception. Their sources of contraception information were varied and their parents tended to be inconsistent as sources.

5) Comparing users and non-users of contraceptives at the time of conception, users tended to be older, have more stable relations with their sexual partners, be more regular and effective contraceptive users, and not have depended on parents as sources of contraception information. Non-users tended to be younger, have less stable relationships with their sexual partner, be less regular and effective contraceptive users, and have depended on parents for contraception information.

Some of the implications drawn from the data are as follows. Women having contraceptive utilization problems come from many settings and backgrounds. Therefore, efforts to improve contraceptive utilization must be varied and flexible to reach all people with contraception needs. Effective contraceptive utilization appears to be influenced

by feelings about independence and responsibility, and of comfort with one's sexuality. Consequently, contraception services need to include opportunities to deal with these broader issues. Contraception knowledge is often limited and effective sources of information are not found consistently in our society. Professional efforts need to be made to ensure good contraception education that can supplement what is learned from parents.

Areas recommended for future study include more thorough investigations of contraception attitudes and knowledge, and their effects on practice. Also, comparison studies of contraceptive utilization of other groups of women are needed, as are experimental studies to test the effectiveness of contraception education and services.

Thesis Chairman

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Chapter I

INTRODUCTION

A. Definition of the Problem

1) Problem Statement

The purpose of this exploratory study is to describe the patterns of contraceptive utilization, as identified by knowledge, attitudes and preconception use of contraceptives, of abortion patients in a large, urban British Columbia hospital.

The study has grown out of concern with the considerable number of abortions being requested and performed in centres in Canada today. Identification of these utilization patterns may indicate specific problems with effective contraception. Knowledge of such problems could be used to improve advice and education concerning contraception.

2) Elements in the Problem

a) Abortion availability. In the past few years, many countries have liberalized their abortion laws. Japan and the eastern European countries were the first to experience extensive use of legal abortions starting between the years 1949 to 1960, followed by Sweden and Great Britain in 1965 and 1967 respectively. Between 1967 and 1970, eleven states in the U.S.A. liberalized their abortion laws to

varying degrees.[1]

In Canada, the Criminal Code was amended in 1969 so that abortion, while still coming under criminal jurisdiction, may be made available in any public general hospital following approval of individual requests by a majority of the members of a committee of physicians. This committee must be appointed by the hospital board for the purpose of considering questions related to termination of pregnancy. The Code directs that the committee may approve abortion in any case where the continuation of a woman's pregnancy, "would or would be likely to endanger her life or health".[2] With this limited and flexible directive for abortion approval, very liberal interpretation by individual hospitals is possible.

If availability of abortion in Canada is considered, it is important to realize that the revised Code does not require all public general hospitals to establish a committee to deal with abortions. However, in the Province of British Columbia, several hospitals have done so and may be assumed to be liberal with their approval as indicated by the following statistics. In 1970, there were 8.5 abortions performed per 100 live births in B.C. and in 1971 there were 19.1 abortions per 100 live births. For 1972, the British

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[1]Daniel Callahan, Abortion: Law, Choice and Morality (London: Collier-Macmillan Ltd., 1970), pp. 141 - 255.

[2]Revised Statutes of Canada 1970, Vol. II (Ottawa: Queen's Printer for Canada, 1970), pp. 1627 - 1629.

Columbia Hospital Insurance Service predicted 25 abortions per 100 live births.[3]

Those countries which first made legal abortions readily available tended to do so primarily for married women with children. However, more recently the general trend has allowed abortion for single nulliparous women also.[4] The Canadian Criminal Code makes no differentiation of marital or parous status for abortion approval.

As abortion laws are eased for all countries, one of the most consistant concerns in the affected countries has been the possible tendency for abortions to be used for contraception.[5] Contraception and abortion have the same final goal: the prevention of children being born. However, resorting to abortion as a contraceptive is often considered by health personnel to be "...neither safe nor simple, and ...the long-term complications alone condemn its use as a contraceptive method."[6]

b) Contraception utilization. Contraceptives are legally available to all people in Canada who are of the age of consent or considered to be emancipated adolescents.

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[3]Contraceptive Practices, Vol. I of Babies by Choice Not by Chance (Vancouver, B.C.: United Community Services of the Greater Vancouver Area, December 1972). p. 6.

[4]Callahan, op. cit., pp. 292-293.

[5]Henry P. David, "Abortion in Psychological Perspective," American Journal of Orthopsychiatry, 42: 65, January 1972.

[6]"Contraception or Abortion," Nursing Times, 69: 250, February 24, 1972.

However, there are situations which inhibit contraception utilization.

For instance, teenagers and unmarried people in our Western society are now often sexually active and, though many of these people find resource personnel who are willing to advise about and prescribe contraceptives, some do not. Not all those who do use modern methods use them well.[7] Some people, especially the young and unmarried, are inhibited by parental and social constraints from seeking and using contraceptives effectively.[8]

Contraceptive availability in Canada is also affected by geography and limited access to appropriate resources. The most effective contraceptive methods (pills, I.U.D.[9]) require a doctor's prescription but not all parts of the country have a doctor's services available. Further, where doctors are available, not all are willing to provide for contraceptives for reasons of specialty limitations or personal beliefs.[10]

Although contraceptive methods are available to both men and women, the most effective ones are for female

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[7]Callahan, op. cit., p. 293.

[8]Michelle Landsburg, "Our Shocking Failure in Birth Control," Chatelaine, November 1972, p. 58.

[9]Michael B. Bracken, et al, "Contraceptive Practice Among New York Abortion Patients," American Journal of Obstetrics and Gynecology, 114: 969, December 1, 1972.

[10]Landsberg, op. cit., p. 106.

use.[11] Consequently, problems of contraception often become a concern for women. This situation cannot help but be intensified by the fact that it is the woman who becomes pregnant and must deal with the desired or undesired consequences regardless of her partner's interest (or lack of) in supporting her. Indeed, it is considered a common expectation among both many men and women that the woman can and should protect herself.

Effective utilization of contraceptives, as with any tool, requires that the user be knowledgeable of the method of use, reason for use, and functions of the contraceptive. Thus, opportunities for learning about contraception and contraceptives are necessary before contraceptives may be used well. However, in Canada today education concerning these matters has no consistant pattern or organization. A person may learn about sexuality and contraception from family or friends, in school, from doctors, nurses, community workers or not at all. The completeness and accuracy of what is learned may vary from all to nothing.[12]

Opportunities for any learning must involve more than provision of content. Motivation and attitudes of both instructor and learner may greatly influence the learner's capacity to learn. This is a major concern in any area of education but particularly with a subject as emotionally charged as contraception. Thus, a person's comfort with his sexual role in the context of his society will influence

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[11] Ibid., p. 107. [12] Ibid., pp. 58 & 106.

both acceptance of contraception knowledge and his ability to use that knowledge.[13,14,15]

The choice of contraceptives may also be influenced by a person's motivation and attitudes. Whether a person can accept and comfortably use contraceptive methods which are directly or indirectly related to intercourse may relate to that person's comfort with his sexuality, feelings about the purpose of intercourse, and the rightness of sexual desire.[16]

Finally, there is the element of potential failure statistically possible with all contraceptives. These failure possibilities are a function of the technical imperfections of the methods, and as such, are not related to problems of utilization nor amenable to avoidance by improved use. Specific rates of failure for the different methods of contraception are hard to define, having been calculated by various people, using various research methods, and providing various ratings. However, the difficulty of obtaining accurate ratings does not do away with the reality of contraceptive failure.[17]

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[13]L.P.O. Tunnadine, Contraception and Sexual Life (London: Tavistock Publications, 1970), p. 13.

[14]Nancy Garrett, "Choosing Contraceptives According to Need," The Canadian Nurse, 68: 40 - 41, September, 1972.

[15]John Peel and Malcolm Potts, Textbook of Contraceptive Practice (Cambridge: Cambridge University Press, 1969), p. 42.

[16]Tunnadine, op. cit., pp. 37 - 41.

[17]Peel, op. cit., pp. 41 - 48.

B. Significance of the Problem to Nursing

The Canadian Nurses' Association has stated its belief that, "Family planning, and its associated and supporting services, are basic to individual and family health care."[18] As such, family planning and contraception must be a concern for nursing. The concepts of primary prevention and of crisis theory can give direction to nurses for their involvement with people needing contraceptives and contraceptive education.

Speaking on the principles of preventive psychiatry, Caplan states that primary prevention, "...involves lowering the rate of new cases of mental disorder in a population over a certain period by counteracting harmful circumstances before they have a chance to produce illness."[19] Utilizing this concept one may consider that primary prevention involves lowering the number of abortions by preventing unwanted conceptions, thus avoiding the chance of unwanted pregnancies. Prevention of conception with sexually active people requires effective utilization of contraceptives.

An unwanted pregnancy and subsequent abortion is a period of potential crisis for a person. The patient's increased susceptibility for involvement as identified in crisis theory indicates that contraceptive need assessment

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[18]"Canadian Nurses' Association Position on Family Planning and Related Health Care," The Canadian Nurse, 68: 11, August 1972.

[19]Gerald Caplan, Principles of Prevention Psychiatry (New York: Basic Books Inc., 1964), p. 26.

and education may be particularly effective at this time of crisis.[20] For effective crisis resolution, future planning with abortion patients must involve such need assessment and teaching while the patient is going through the crisis process.

The C.N.A. has elaborated its position to state that, "Nurses must be prepared with skills based on knowledge of the complex relationships and psychodynamics involved in sexuality, human reproduction, and contraception to permit them to provide the needed service and education in family planning and related health care."[21] With such preparation, nurses will be able to carry out primary prevention and crisis intervention with patients having contraceptive service and education needs.

Present professional opportunities for contraception teaching may be found in hospitals, private medical services, obstetric and gynecological clinics, family planning clinics and associations, and community health and welfare agencies. Nurses function potentially in all of these areas and as such have ready access to people with contraception needs.

Another convincing aspect to the argument for nurses as contraception advisors and teachers is financial. Societal health needs include effective contraception education and society desires this service at as low a cost as

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[20] Ibid., p. 48.

[21] "Canadian Nurses' Association Position," op. cit., p.11.

possible. Nurses may perform this task for less expense than would doctors, who could then confine their work to consultation and patient contact necessary to deal with complex situations.

As appropriate teachers of contraception, nurses need to understand the problems of contraceptive practice, knowledge, and attitudes experienced by individuals if contraception teaching is to facilitate effective utilization. As identified high-risk contraceptive users, abortion patients are appropriate subjects for a nursing study to define contraception problems.

Chapter II

REVIEW OF THE LITERATURE

A. Contraceptive Utilization

In the preceding discussion concerning contraception, three aspects of contraceptive utilization have been delineated: contraception practice, knowledge, and attitudes. The selection of these three areas as target concerns in this study follows the trend in the literature.

1) Research Literature

The first question asked in most research on contraception practice is whether or not contraception had been used by the subjects some time in their lives or at the time of conception if they were pregnant. Additional questions have considered many variables as they relate to who had or had not used contraception.

In 1972, Bracken et al reported on a study done in a private hospital in New York City with 1033 abortion patients. A self-administered questionnaire was presented to all patients whose abortion requests were accepted during the study period.[1] They found that 45.5% of the sample had used some form of contraception within the previous 12 months. The method which had been most commonly used was the pill but with all methods used, technically ineffective methods

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[1]Michael B. Bracken, et al, "Contraceptive Practice Among New York Abortion Patients," American Journal of Obstetrics & Gynecology, 114: 968, December 1, 1972.

were relied on heavily. Technically effective methods were identified as the pill, IUD and diaphragm.[2] Most of the contraception users had used more than one method, and when methods were changed it was to less effective ones in 90% of the cases.[3]

Concerning other variables, they found that effective contraception increased with age increase. Married women tended to practice more effective contraception as did women who had had previous pregnancies. An increase of intercourse frequency related to increased use of the pill whereas subjects who had intercourse infrequently tended to use the withdrawal and rhythm methods. Changes in relationships with partners were frequently reported to precede changes in method which, as noted above, tended to be a move to less effective methods.[4]

Grauer reported on a study done between April 1971 and March 1972 with 150 abortion patients in a community hospital in Montreal. Data were collected in interviews conducted by the author. The sampling method was not clearly defined in the report.[5] Grauer found that 59% of the subjects reported using some form of contraception at the time of conception, a situation which he defined as contraception

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[2]Ibid., p. 969. [3]Ibid., p. 975.

[4]Ibid., p. 975.

[5]H. Grauer, "A Study of Contraception as Related to Unwanted Pregnancy," Canadian Medical Association Journal, 107: 739, October 21, 1972.

failure. Of this 59%, 14% had relied completely on their partner to use contraception.[6]

He noted that 47% of the subjects under 25 years of age had used contraceptives at conception but that 67% of those over 25 years had practiced contraception, thus agreeing with Bracken et al that contraception practice increased with age. Married subjects had used contraception more often than single but no correlation with contraception practice was evident for data on educational, social, or religious background.[7]

Grauer also noticed that with those subjects who sought abortion at 11 weeks gestation or later, only 34% had used contraceptives. However, with those who sought abortion earlier, 66% had been users.[8]

A complex study to explore sexual knowledge, attitudes, and contraceptive practices of girls seen at a Teen Clinic operated by Planned Parenthood in California was done between November 1969 and July 1970 by Goldsmith et al.[9] Three groups of subjects were compared: multiparous women receiving contraception advice, women seeking abortion, and women continuing out-of-wedlock pregnancies to term. These three groups were considered comparable in age and socioeconomic status.[10]

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[6]Ibid., p. 740. [7]Ibid., p. 740.

[8]Ibid., p. 741.

[9]Sadja Goldsmith, et al, "Teenagers, Sex & Contraception," Family Planning Perspectives, 4: 32, January, 1972.

[10]Ibid., pp. 32 - 33.

The three groups reported having used contraceptives at some time in the following numbers:

advice seekers - 87%

abortion seekers - 76%

maternity patients - 62% [11]

They reported having used contraceptives since their last menstraul period as follows:

advice seekers - 59%

abortion seekers - 39%

maternity patients - 34% [12]

Specific to the abortion group, less technically effective methods of contraception were used at a higher rate than effective methods, both since the last menstraul period and at any previous time. Effective methods are defined in this study as the pill, IUD, and diaphragm, in agreement with Bracken et al.[13]

Several other studies have reported data useful to an understanding of contraception practice. An unpublished study by Weiner & Davis done in Vancouver in 1969 revealed that only 39% of their small sample of unmarried, pregnant girls receiving prenatal care at the Women's Clinic of a large general hospital had practiced contraception at some

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[11] Ibid., p. 37.

[12] Ibid., p. 37.

[13] Ibid., p. 37.

time.[14]

In a study by Hill completed in October 1971 with 1,642 abortion patients in Kansas, interview data were analysed to show that 20.1% of the subjects had used contraceptives at the time of conception, a number somewhat less than that reported in the Bracken and Grauer studies. No difference was noted in contraception practice between who were or had been married, but single girls used contraceptives significantly less often than did married ones. Also, contraception use increased with age.[15]

Daily and Nicholas compared use of contraceptives by women terminating pregnancy either by birth or abortion. They found that of the abortion patients, 59% had used contraception in the past two years and of the post partum patients, only 45% had used contraception within the same time. In both groups, patients between 15 and 19 years of age used contraceptives much less often than did patients between 25 and 29 years.[16]

Oppel et al compared contraception use between early

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[14]Enid Weiner & Judith Davis, "Provisional Study of a Group of Unmarried Mothers in the City of Vancouver: Some Social Characteristics, Knowledge of Attitudes Towards & Practice of Contraception," (unpublished paper, University of British Columbia, 1969), pp. 5-6.

[15]James G. Hill, "Birth Control Usage Among Abortion Patients," Kansas Medical Society Journal, 73: 296-97, June 1972.

[16]Edwin F. Daily & Nick Nicholas, "Use of Conception Control Methods Before Pregnancies Terminating in Birth or a Requested Abortion in New York City Municipal Hospitals," American Journal of Public Health, 62: 1544-1545, November, 1972.

abortion patients having a dilatation and curretage procedure (D & C) with late abortion patients having a saline induction. He reported that the early abortion patients used contraceptives more frequently and more effectively thus agreeing with Grauer's findings with this variable.[17]

Literature of research involving contraception attitudes and knowledge is much more limited than that just reviewed on contraception practice. Behavioural definitions and measurements of contraception attitudes have not been developed to any extend and tests of knowledge tend to be inconclusive and incompletely reported.

The Goldsmith study with three groups of California teenagers sought data on attitudes towards contraception, pregnancy, intercourse and masturbation in an attempt designed to assess attitudes towards sexuality.[18] The authors noted that the group who were seeking advice on contraception and who had indicated greater use of contraceptives had more comfortable feelings about sexuality than did the two pregnant groups planning abortion or delivery. They concluded that "an attitude accepting one's own sexuality is a more important correlate with contraceptive use than such other factors as exposure to sex education, knowledge of sex and contraception or religious background."[19] Some of the specific data showed

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[17]Wallace Oppel, et al, "Contraceptive Antecedents to Early & Late Therapeutic Abortions," American Journal of Public Health, 62: 826, June, 1972.

[18]Goldsmith, op. cit., pp. 34-35.

[19]Ibid., pp. 36-37.

that the contraceptive-seekers found intercourse more enjoyable and that they took initiative to seek out effective contraceptives while the pregnant subjects sought help only after becoming pregnant.[20]

Both Grauer and Oppel reported differences in contraceptive use between patients seeking abortions earlier or later in their pregnancies. Grauer suggested that the early abortion seekers, who used contraceptives more often indicated a more realistic attitude toward the possibility of conception and recognition of pregnancy.[21]

Contraception knowledge was also considered by Goldsmith et al. They found that scores obtained by the contraception advice-seeking group on knowledge about birth control and general sexual material, while somewhat higher than the scores of the two pregnant groups, were not statistically significant.[22] The general state of knowledge found in all three groups had limitations. For example, half of the girls who had used the rhythm method did not know that their fertile time probably occured mid cycle.[23]

Oppel et al, who found that early abortees used contraceptives more often than late abortees, noted that there was no difference between the contraception knowledge scores of each group.[24] Kane et al, in a study done in North Carolina

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[20]Ibid., pp. 37-38. [21]Grauer, op. cit., p. 740.

[22]Goldsmith, op. cit., p. 33. [23]Ibid., p. 37.

[24]Oppel, op. cit., p. 287.

in 1968-69 with patients delivered of babies, also found that the contraception knowledge of contraceptive users did not vary significantly.[25] The adequacy of knowledge of the subjects in these studies was not identified.

Weiner and Davis reported that only 27.8% of their unwed, pregnant subjects indicated accurate knowledge of contraception in general and no one had more than minimal knowledge of specific contraceptive methods. They also considered the sources of knowledge and found that only 27.8% of the subjects learned about sex from their parents and only 5.5% learned about birth control from parents.[26] Hill noted that none of the abortion patients he studied received information about contraception in school.[27]

To summarize briefly the literature reviewed to this point, research has indicated that contraception is practiced by many women who find themselves pregnant and seek abortions or delivery. Ineffective contraception and lack of contraception may be related to such variables as age, marital status, choice of contraceptive, stage of pregnancy when seeking help, and previous pregnancy. Research concerning attitudes, though not well defined or developed, has suggested that comfort with the reality of one's sexuality may affect

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[25]Francis J. Kane, et al, "Motivational Factors Affecting Contraceptive Use," American Journal of Obstetrics & Gynecology, 110: 1052, August 15, 1971.

[26]Weiner, op. cit., p. 5.

[27]Hill, op. cit., p. 301.

the ability to use contraception knowledge and practice contraception effectively. Research on contraception knowledge appears inconclusive but has indicated that knowledge tends to be less than adequate in most subjects.

2) Opinion Literature

With the deficit of research on contraception attitudes and knowledge, literature with discussion and opinions on these areas has been considered.

In his textbook on contraceptive utilization, Peel concluded that effective use of contraceptives probably depends particularly on social and psychological variables associated with their acceptability. He included such variables as an individual's motivation for intercourse and contraception.[28]

Bracken et al, in their comments on their study of contraception practice among abortion patients, stated, "We need to clarify some of the intervening processes which operate at the psychosocial and intrapsychic level and which describe in greater detail the woman who is at risk of an unwanted pregnancy and, therefore, an abortion."[29] They were particularly interested in the interpersonal relationships which are conducive to poor contraception practice.

Sandberg, drawing on clinical experience with abortion

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[28]John Peel & Malcolm Potts, Textbook of Contraceptive Practice (Cambridge: Cambridge University Press, 1969), p. 42.

[29]Bracken, op. cit., p. 976.

patients stated, "It is apparent that contraceptive effectiveness is not simply a matter of technology but is also a matter of the influences of psychological, sociologic, and many other factors." He defined 14 possible categories of intrapsychic and interactional reasons why presumably undesired pregnancies have been allowed to occur through ineffective contraception.[30]

In a paper concerned with choice of contraceptives, Garrett wrote that problems of acceptance of sexuality frequently lead to conflict and ambivalence concerning contraception practice. She discussed the need to ascertain a person's feelings about sexuality when advising on contraception, and described some possible problem situations as follows. Conflict arising from divided allegiance to the new and old moralities can create guilt leading to self punishment behaviour potentiating uncomfortable side effects of contraceptives. Conflict about having children could cause difficulty making decisions about and carrying through contraception practice. Conflict about sexuality could inhibit ability to use contraceptives associated with intercourse.[31]

Tunnadine described work in a family planning clinic in London, stressing the need to study attitudes in order to understand acceptability and motivation of contraceptive

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[30]Eugene C. Sandberg & R. I. Jacobs, "Psychology of the Misuse & Rejection of Contraception, "American Journal of Obstetrics & Gynecology," 110: 228, May 15, 1971.

[31]Nancy Garrett, "Choosing Contraceptives According to Need," The Canadian Nurse, 68: 40-41, September, 1972.

use.[32] She enlarged on the effects of conflict such as Garrett discussed and went on to note that the patient whose only problem was ignorance was rare. She summarized the link between attitudes and knowledge when stating, "factual teaching.. .....can only be accepted and taken in by individual patients according to their own emotional capacity."[33]

While doing his study with abortion patients, Hill gathered anecdotal information which indicated to him also that many patients had strong ambivalent feelings about their sexual behaviour. Such patients had often been unable to seek contraceptive advice because of difficulty admitting to plans for intercourse. He noted that most patients regarded favourably the opportunity to discuss their sexuality.[34]

B. Contraceptive Methods

Techniques and devices which are generally considered to have some contraceptive value are the following: oral contraceptive pills, intrauterine devices (IUD), diaphragms, spermacides, condoms, the rhythm method, and coitus interruptus (withdrawal).[35] Douches are not considered of contraceptive value, and in fact, may assist sperm to move into the cervical orifice.

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[32] L.P.O. Tunnadine, Contraception & Sexual Life (London: Tavistock Publications, 1970), p. XIII.

[33] Ibid., p. 37. [34] Hill, op. cit., pp. 298-301.

[35] Donna Cherniak & Allan Feingold (eds.), Birth Control Handbook (Montreal: Arts & Science Undergraduate Society of McGill University, 1970), pp. 33-34.

Literature concerning effectiveness of various contraceptives is difficult to assess due to many variations of study techniques and frequently conflicting conclusions. The pamphlet commonly called the McGill Handbook noted the need to distinguish between "theoretical failure rate", defined as "the effectiveness of a method if it is used absolutely consistantly and according to instructions," and the "clinical failure rate", defined as "the effectiveness of a method used under average conditions by average people."[36] This clinical failure rate acknowledges the influence of variables which arise from the human component of contraceptive utilization. An example used in the Handbook is that though both pills and condoms may have a theoretical failure rate of near .0%, the clinical failure rate is higher for condoms than pills because use of condoms provides many more opportunities for individual failure than do pills.[37]

Kleinman made the same type of distinction using the labels of "theoretical effectiveness" and "use-effectivensss". In considering methods for calculating use-effectiveness, Kleinman described the Pearl formula, developed in the 1930's. This traditionally used formula calculates in percent the number of times conception occurs during a year's period of exposure, assuming that ovulation occurs 13 times a year, and that regular heterosexual contacts occur. He noted that this formula does not consider such pertinent variables as continuity of use, duration of use, and influence of side effects.

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[36]Ibid., p. 34.

[37]Ibid., p. 34.

However, universally accepted measures of these variables have not been developed.[38]

Using the Pearl formula, the McGill Handbook listed the clinical failure rates of contraceptive methods as follows:

pill (combination type)	-	.05%
I.U.D.	-	1.5 - 8%
condom	-	10 - 15%
diaphragm & spermacide	-	10 - 20%
spermacide	-	15 - 25%
rhythm	-	15 - 30%
withdrawal	-	20 - 30% [39]

Consideration of abortion as another contraceptive method was discussed by Peel. He argued that "acceptance of principles of contraception must also entail an acceptance of abortion as final defence against unwanted pregnancy." He went on to note that abortion is the least desirable form of birth control.[40]

Many human-use problems leading to individual failure of contraceptive methods appear to be related to the type of contact inherent in the method. It is interesting to note that, in the Pearl formula ratings the clinical failure rates are lowest for those methods (pill & IUD) having the least

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[38] R.L. Kleinman (ed.), Medical Handbook, (London: International Planned Parenthood Federation, 1968), p. 88-90.

[39] Cherniak, op. cit., p. 34.

[40] Peel, op. cit., p. 243.

direct contact with intercourse. Garrett, Tunnadine, and the McGill Handbook have described and discussed many such problems and approaches for dealing with the problems.[41] [42] [43]

C. Demographic Characteristics of Abortion Patients

In order to have some basic understanding of the characteristics of the population of women seeking abortions, demographic data from two studies will be noted.

Grauer studied 150 abortion patients in Montreal and reported the following data. The study was done between April 1971 and March 1972.

age group:

under 15	15-20	21-25	26-30	31-35	36-40	over 40
1%	12%	26%	15%	25%	17%	4%

marital status:

single	married	divorced	separated
40%	52%	5%	3%

employment outside home at time of conception:

yes	no
42%	58%

education level:

elementary	High school	training	college incomplete	college complete
11%	49%	26%	9%	5%

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[41] Garrett, op. cit., pp. 40-41.

[42] Tunnadine, op. cit., pp. 38-40.

[43] Cherniak, op. cit., pp. 14-34.

number of weeks pregnant when to the doctor:

weeks

4	5	6	7	8	9	10
4%	5.3%	24%	8.7%	20%	4.7%	12%
11	12	13	14	15	16	18
4%	8%	2%	4.7%	.67%	1.3%	.67%

[44]

Claman et al studied abortion patients in Vancouver between 1965 and July 1970. During this period 500 abortions were performed in the study institution, 179 (36%) of which were done between 1965 - 1969 and the rest occurring in 1970 following the amendment of the Criminal Code. Unfortunately, the report does not separate the data from before and after the change in law so that any differences in the patients of the two periods cannot be considered.

age groups:

under 15	15-19	20-24	25-29	30-34	35-40	over 40
1%	17%	20%	21%	18%	15%	8%

marital status:

single	married	divorced	separated	widowed
38%	48%	5%	7%	2%

social status:

professional	skilled labour	business
17%	26%	21%
unskilled	student	welfare
11%	17%	7%

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[44]Grauer, op. cit., p. 740.

previous induced abortions:

no	yes	legal	illegal
89%	10%	5%	5% [45]

[45] A. David Claman, et al, "Impact on Hospital Practice of Liberalizing Abortions & Female Sterilizations, "Canadian Medical Association Journal, 105: 38, July 10, 1971

Chapter III

DESIGN

A. Research Question

Hypotheses were not formulated and tested for this study. Research related to the problem has not yet consistantly identified and defined variables of contraceptive utilization. The researcher therefore attempted to answer the following question.

What are the contraception practices, attitudes, and knowledge of a group of abortion patients?

B. Definitions

1) Abortion Patient - a woman admitted to an accredited or approved hospital to undergo termination of pregnancy as approved according to section 237 of the Criminal Code of Canada.

2) Contraceptive Utilization - behaviour by a sexually active couple which is specific to prevention of conception and which may be identified in terms of practice, attitudes, and knowledge.

3) Contraception Practice - any actions by an abortion patient and/or her partner designed to prevent conception as reported by the patient.

4) Contraception Attitudes - disposition to regard contraception practice and

knowledge in a positive or negative way as reported and indicated by an abortion patient.

5) Contraception Knowledge - information concerning the process of conception and the methods and functions of contraceptive techniques as reported by an abortion patient.

6) Preconception - that period of time after puberty and preceding the conception of the pregnancy for which the patient is seeking abortion.

7) Unwanted Pregnancy - a pregnancy which was unplanned and/or undesired at the time of conception.

8) Effective Contraception - contraceptive utilization which is not followed by pregnancy.

9) Ineffective Contraception - contraceptive utilization which is followed by pregnancy.

10) Contraception Failure - ineffective contraception which occurs when contraception practices have been carried out according to prescribed methodology and which is followed by pregnancy.

C. Assumptions

The following assumptions are basic to the pursuit of this study.

1) Contraception practices, attitudes, and knowledge which the abortion patient reports or indicates describe

contraceptive utilization.

2) Abortion patients seek abortion in order to terminate pregnancies which are unwanted.

3) Unwanted pregnancies may occur with ineffective contraceptive utilization.

4) Subjects are able and willing to recall information and answer questions accurately.

D. Limitations

The following limitations are inherent in this study.

1) The effects of stress on the abortion patients' accuracy of recall and reply are not controlled.

2) The population is limited to:

- English speaking abortion patients
- ineffective contraceptive utilizers who become pregnant and who seek legal abortions to deal with unwanted pregnancies.

3) Validity of the research tool is limited to face and content validity and so has no empirical basis. Consequently results of the study cannot be generalized and provide only indications of trends within the study population.

E. Research Plan

1) Approach

The study was exploratory. The data were gathered by the researcher in interviews with abortion patients using a questionnaire to structure the interview.

2) Setting

The data were gathered from abortion patients on an in-patient unit in an urban general hospital. The interviews were conducted the evening before the day of surgery, after the patients were admitted.

3) Population

The study population included all women admitted to the in-patient unit of an urban British Columbia hospital for an abortion by the D & C/aspiration methods over a continuous 22 day period. These patients were under the services of either staff or private physicians.

4) Sample

The study sample was made up of 30 patients selected from the population. On each day of the study period that abortion patients were admitted to the study unit, 2 patients were randomly selected to be interviewed. The selected patients had the study explained, the method described, and were assured that participation was voluntary and withdrawal from the interview possible at any time. All participating patients signed a form consenting to be interviewed for the study.

A plan was made to check the demographic data of the sample with that of the study population and of the larger population of abortion patients having had D & C/aspiration abortions during the preceding year in the study hospital. This was to be done in order to check the representativeness of the sample to these two populations. However, demographic

data on the abortion patient population had not been collected by the hospital in a manner useful to the study and patient records over the desired period were not available to the researcher.

5) The Tool - a description.

The data collection instrument was a questionnaire developed specifically for the study. The questions were administered verbally and recorded on paper by the researcher during a private interview with each subject. The recording of the answers was structured according to a pattern of anticipated responses developed for each question but with room for unexpected responses.

The questionnaire had 5 sections. There were 7 questions concerning demographic information, 16 questions concerning contraception practice, 14 questions concerning contraception attitudes, 15 questions concerning contraception knowledge, and one question concerning the subject's explanation of the occurance of the pregnancy. The total was 53 questions.

F. Development of the Tool

There were three major concerns in the research question: contraception practices, contraception attitudes, and contraception knowledge. In the questionnaire development process, 14 areas of information pertinent to the three major concerns were identified and defined as objectives. These objectives were to learn from each abortion patient:

- concerning practice:
  1) what contraceptives had been used in the past.
  2) with what consistancy had contraceptives been used.
  3) how were contraceptive methods chosen.
  4) what had been the subject's need for contraception.
  5) what plans did the subject have for failed contraception.
- concerning attitudes:
  6) what feelings the subject had about conceiving.
  7) what feelings the subject had about using contraceptives.
  8) what feelings the subject had about contraceptives and sexual role.
  9) what feelings the subject had about abortion.
- concerning knowledge:
  10) what the subject knows about contraception.
  11) what the subject knows about conception.
  12) what the subject had known about abortion preconception.
  13) the source of the subjects information concerning contraception.
- concerning the subject's explanation:
  14) the subject's own understanding of why this pregnancy occured.

The selection of these 14 objectives was made from

reviewing the literature and from the researcher's own experience. In the literature on contraceptive utilization each study or discussion considered only a few questions. The researcher attempted to identify all of those questions which suggested solutions to the research question and to combine them into a sequence of objectives.

The researcher also considered her own work with abortion patients and with nurses who cared for the patients, looking at any experiences which provided insight into the patients' contraceptive utilization. This background was used to confirm or adjust the objectives as identified from the literature.

Once the objectives of the questionnaire were selected, questions were developed to gather specific information to meet the objectives.

Preliminary testing of the questions was done in the setting to be used for the study. Initial testing evaluated the clarity of the questions, and the questions' usefulness in providing desired information. The patients' reception to the individual questions and to the interview process were also assessed. When the format of the questionnaire was finalized, it was tested along with the formalized introduction for timing and patient acceptance. The questionnaire was reviewed during its development and in its final form by resource personnel but was not subjected to empirical validity testing.

The questionnaire and introductory material are in Appendix A.

G. Analysis of the Data

Analysis of the data was done in three parts.

Frequency distributions were compiled for the preliminary demographic data.

Frequency distributions were compiled for each of the 53 questions and considered in relation to each of the 14 objectives.

Groupings of the subjects according to any variables indicating significant differences were considered for correlation analysis. The chi-square contingency procedure and the Fisher exact probability test were used to test for significance.

Chapter IV

RESULTS AND ANALYSIS

A. Sampling

A total of 33 abortion patients were randomly selected from a population of 77 and asked to participate in the study. Two patients refused consent. One of these was a hospital employee who felt uneasy about involvement in any activity not necessary for the abortion and the other stated she was under psychiatric care and too anxious to be involved. A third subject consented but became ill during the interview which was discontinued. The total number of respondents was 30 and the response rate was 90.9%.

B. Demographic Data

The data discussed in this section are tabulated in Appendix B, Table I.

1) Age

The age range of the sample was 16-37 years. The mean age was 22.5 years and the mode was 21 years. Condensing the ages into four groupings, the distribution was as follows:

ages:	16 - 19	- 7
	20 - 23	- 13
	24 - 27	- 7
	28 - 37	- 3

2) Marital Status

The marital status of the subjects, including whether or not they lived with their sexual partner was as follows:

with partner	- 17	- married	- 9
		common law	- 8

without partner - 13 - single - 9
separated - 3
divorced - 1

Of the single girls living without their partners, 4 lived with their parents and 5 lived on their own.

3) Number of Children

The subjects without children numbered 20 and those with children were 10. Of these 10, 4 had one child, 4 had 2 children, one had 4 children, and one had 5 children.

4) Occupation

The occupation distribution was as follows:

housewife - 8

student - 8

employed - 14 - professional - 1
business/clerical - 7
skilled labour - 3
unskilled labour - 3

5) Education Level Completed

The distribution of schooling levels was as follows:

grade school incomplete - 3

high school incomplete - 9 - completed grade 9 - 1
completed grades 10 & 11 - 8

high school completed - 18 - no further - 11
post H.S. - 7

6) Number of Weeks Pregnant When to Doctor

The number of weeks the subjects were pregnant when they sought medical assistance ranged from 3 to 17 weeks. The mean was 6.8 weeks.

Although abortion by D & C/aspiration is generally considered less safe after the twelfth week, 3 subjects were between 13 and 17 weeks pregnant when first to the doctor.

The other 27 were pregnant as follows:

weeks	
3 - 4	- 10
5 - 6	- 7
7 - 8	- 6
9 - 12	- 4

7) Number of Previous Abortions

There were 3 subjects who had had a previous abortion, one each. This was a first experience for the other 27.

C. Data in Relation to the Objectives

1) What contraceptives have been used?

There were 27 subjects out of the 30 who had used contraceptives at some time, and 3 who had never used them.

Specific methods had been used at some time by the following numbers:

contraceptive pills	- 23
withdrawal	- 10
rhythm	- 10
spermacide	- 9
IUD	- 7
condom	- 6
diaphragm	- 1

Concerning the number of different methods used by each subject at some time, 8 had used one method, 9 had used 2 methods, 5 had used 3 methods, 3 had used 4 methods, and one each had used 6 and 7 methods.

At the time of conception of the pregnancy being aborted, 17 subjects reported having used some method of contraception and 13 reported not having been users.

Of the 17 users, 7 were using the more effective methods of pill and IUD, while 10 were using methods of limited effectiveness as follows:

limited effectiveness	- 10 -	spermacide	- 5
		condom	- 1
		withdrawal	- 2
		rhythm	- 2
effective	- 7 -	pill	- 2
		IUD	- 3
		IUD and spermacide	- 2

2) With what consistancy had contraceptives been used?

Concerning contraceptive use errors in the past year, the 27 subjects who had used contraceptives at some time reported as follows:

errors known	- 16
errors not known	- 11

Concerning contraceptive errors at the time of conception, the 17 users reported as follows:

errors known	- 5 -	contraceptives used -	pills
			spermacide
			withdrawal
			rhythm
errors not known	- 12 -	contraceptives used -	IUD
			spermacide
			withdrawal
			rhythm
			condom

Three questions specific to pill use were asked. There were 23 subjects who had at some time used contraceptive pills and who had stopped them.

The reasons given for stopping the pills were problems with side effects - 11, concern for health - 7, to take a break from continuous use - 3, no money to buy them - 1, and contraception not needed at the time - 1.

When asked what contraceptives were used after the pills were stopped, the subjects reported as follows:

no contraceptive	- 8
limited - effective method	- 10
effective method	- 5

3) How were contraceptive methods chosen?

When asked if they spoke with their partners about contraception, the subjects reported that 20 did and 10 did not (including the 3 who never used contraceptives).

Concerning who made the decision on what contraceptive to use, the 27 sometime-users reported as follows:

subject and partner decided	- 10
subject decided alone	- 17

Therefore, of the 20 subjects who talked with their partners about contraception, only 10 shared the decision.

When asked about their reasons for selecting their contraceptives, the subjects stated with decreasing frequency; ease and convenience of use, reliability, doctor's recommendation, and obtainable without a doctor's prescription.

4) What had been the subjects' need for contraception?

Concerning their need for contraception, the subjects reported intercourse frequency as follows:

2-3 times per week	- 18
about once per week	- 6
irregular and infrequent	- 6

Around the time of conception, 23 reported no change in their frequency patterns of intercourse while 6 reported decreased frequency and one reported increased frequency.

When asked if they or their partner had any condition

which they thought may interfere with conception, 27 reported none known. One subject stated she had a tubal abnormality, one had thought her partner was infertile because he was using street drugs, and one had believed she could not become pregnant for unspecified reasons.

5) What plans had the subject considered for failed contraception?

When asked if they had thought about the possibility of becoming pregnant in the past year, 22 subjects reported they had and 8 reported they had not.

When asked if they had spoken with their partners about the possibility of pregnancy, 19 stated they had and 11 stated they had not.

Concerning plans regarding the possibility of pregnancy, 17 had had no thoughts or plans, 5 had vaguely considered the possibility of abortion, and 8 had had specific plans - 6 expected to have an abortion if necessary and 2 expected to keep the baby.

Comparing the above data, though more subjects thought and talked about the possibility of pregnancy than did not, fewer subjects made any plans to deal with this possibility. This pattern coincides with contraceptive choosing patterns in which more subjects talked with their partners about contraception but fewer shared the choice.

6) What had been the subjects' feelings about the possibility of conceiving?

In an attempt to deal with this objective, the subjects were asked if they had worried about the possibility of

conceiving during the past year. They reported as follows:

very worried	- 6
some worry	- 9
had not worried	- 15

When asked if they wanted to have a baby sometime in the future, 22 reported they did, 4 reported perhaps, and 4 reported they did not. Concerning feelings of satisfaction about knowing of their ability to conceive, 16 were pleased to know, 11 were indifferent, and 3 were unhappy.

The reasons given for making the decision to terminate the pregnancy were, in decreasing frequency: not at a good or convenient time to have a child, not married, unable to support a child, having a child would be too demanding on themselves, and no more children wanted.

7) What feelings the subject had about using contraceptives?

When asked their feelings about using contraceptives, the subjects reported as follows:

happy to use	- 15
indifferent/no thoughts	- 5
dislike using	- 10

Concerning their comfort talking about and arranging for contraception, the subjects reported that 19 were comfortable and 11 were uncomfortable.

When asked about their feelings concerning responsibility for contraception, 19 felt that responsibility should be shared by their partners, 10 felt they should take the responsibility, and one had no opinion.

Comparing these feelings about responsibility with the chosing of contraceptives, it is indicated that though

many felt responsibility should be shared (19), fewer actually did share it (10).

8) What feelings the subject had about contraception and sexual role.

Concerning these feelings, subjects were asked how their enjoyment of intercourse was affected by the contraceptive most recently used. The reports were as follows: no effect - 12, increased relaxation with contraceptive - 8, decreased relaxation with contraceptive - 6, no answer - 4. When asked about their usual enjoyment of intercourse, the subjects responded as follows: very enjoyable - 20, usually enjoyable - 6, sometimes enjoyable - 3, seldom enjoyable - 1.

When asked about their comfort talking about sexual matters, 21 stated they were comfortable, one was indifferent, and 8 were uncomfortable. These data follow the pattern of the subjects' comfort dealing with contraception.

Concerning the importance of sexual relations to the subjects, the most frequent response was that it was part of a close relationship. Other responses were: pleasure for their partner and pleasure for themselves.

9) What feelings the subject had about abortion?

When asked about their feelings on the importance of abortion in relation to contraception, 28 subjects felt it was a necessary procedure. Of these, 19 viewed abortion as a necessary tool to deal with inevitable failed contraception while 9 saw abortion in a more negative light as a form of birth control, the present need of which was unfortunate. Two

subjects felt that abortion should not be necessary as a contraceptive method.

Concerning their comfort about having this abortion, the responses were as follows:

comfortable	- 10
accept but do not like	- 14
uncomfortable and do not like	- 6

The subjects were asked if they preferred to be awake or asleep during the abortion procedure. There were 24 preferring to be asleep and 6 with no preference.

10) What did the subject know about contraception?

The subjects were asked to list the contraceptives they knew up to four: 23 subjects listed 4 contraceptive methods, 2 listed 3 methods, 2 listed 2 methods, 1 listed 1 method, and 2 were unable to list any method.

Concerning their knowledge of the listed methods, the subjects were asked for information relating to:

- how the methods functioned to prevent conception
- how the methods were used
- what problems were inherent to the methods
- how effective were the methods

There was a possible total score of 8 for each subject's knowledge of each contraceptive she identified in each of the 4 question areas.

The scores indicated a pattern of contraception knowledge similar in all 4 question areas. This pattern followed an S curve with higher numbers of subjects scoring in both the very low range and the medium-high range.

	Scores								
	0	1	2	3	4	5	6	7	8
Total no. of responses -	15	5	4	10	14	26	17	17	12

The scores for each of the 4 question areas are tabulated in Appendix C, Table II.

11) What did the subject know about conception

Concerning knowledge of conception, the subjects were asked about female and male anatomy and function. The scores indicated better knowledge of the female than the male, and were as follows:

	Scores		
	0	1	2
knowledge re: female	3	9	18
knowledge re: male	6	15	9

Knowledge of the female fertility period appeared to be poor according to the scores on a question about calculating that period. The scores were as follows:

	Scores		
	0	1	2
number of responses	16	6	8

The total scores for the above questions on knowledge of conception were as follows:

	Scores		
	0	1	2
total number of responses	25	30	35

12) What did the subject know about abortion, preconception.

Concerning the subjects' knowledge, preconception, about the legal availability of abortions, the answers were as follows:

available legally	- 23
illegal only	- 3
did not know	- 4

Concerning the ease of availability, the subjects' knowledge was as follows: 8 understood abortions were available on request, 10 thought they were "perhaps" available, 7 believed they were difficult to obtain, and 5 had had no ideas about availability.

Regarding knowledge of abortion techniques, 12 subjects reported no knowledge, 9 reported some knowledge by stating "D & C" but were unable to describe this procedure, and 9 described the scraping or suctioning aspect of the D & C/ aspiration techniques. No subjects noted an induction and delivery technique.

Concerning knowledge of possible problems with abortions, 5 subjects noted some specific problems, 16 identified some general, vague problem areas, and 9 did not know of anything.

13) What were the sources of the subjects' information regarding contraception.

When asked to list all of the sources of their information on sexual relations and pregnancy, the subjects noted the following in decreasing frequency:

friends
school programmes
mothers

reading materials
partners
siblings
doctors
fathers

The single best sources of information were reported as follows:

partner	- 8
reading material	- 8
friends	- 5
mother	- 3
school programme	- 3
did not know	- 3

Sources of information about contraception were listed in decreasing frequency as follows:

doctor
reading material
friends
mother
school programme
family planning clinic
pharmacist
siblings
partner
social worker

The single best sources of information about contraceptives were as follows:

reading material	- 10
doctor	- 9
mother	- 2
social worker	- 1
school programme	- 1
family planning clinic	- 1
pharmacist	- 1
did not know	- 5

Data were requested specifically about parents as sources of information about contraception. The responses concerning speaking with parents about sexual relations and pregnancy were as follows:

spoke with parents	- 14
did not speak with parents	- 16

The responses concerning speaking with parents about contraceptives were as follows:

spoke with parents	- 6
did not speak with parents	- 24

When asked about their comfort talking with parents about sexual matters, the subjects reported as follows:

comfortable	- 6
uncomfortable	- 13
little or no talk	- 11

14) What was the subjects' own explanations for the occurrence of this pregnancy.

This question was not structured in any way. The subjects' unaided responses were recorded and were then considered for similar characteristics. In many responses, more than one characteristic was noted. This coding was done by the researcher alone with no outside validation. The response characteristics were as follows:

avoidance/unrealistic	- 21	(did not consider the possibility of contraception failure, the need for more information, or the possibility of pregnancy)
ignorance of the effectiveness of the method used	- 13	
contraception failure	- 10	
magical thinking - "will not happen to me"	- 6	
careless contraceptive use	- 5	
passiveness about the ability to influence the possibility of pregnancy	- 4	
lack of concern - had alternatives planned	- 2	

D. Comparison of Contraceptive Users & Non-users at Conception.

As planned in the study design for the analysis of the data, groupings in the data were considered for correlation analysis. The one grouping of interest which was explored concerned the use of contraceptives at the time of conception of the pregnancy being terminated by abortion.

There were 17 subjects who reported having used contraceptives at the time of conception and 13 who did not use them. The rest of the data were coded and analysed according to these two groups. Significant differences and interesting tendencies between the two groups were noted with several items.

Chi-square contingency and Fisher's tests for significance (when two frequencies were below 5) were used to check correlational significance.

Following is an outline of the differences noted between the two groups:

1) Demographic

a) Age. Users were more often over 21 years than were non-users.

	< 21	> 21
U	2	14
NU	6	5

N = 27

$X^2 = 5.5268$
df = 1

$\therefore$ significant at $< .02$ level

b) Marital status. Users tended to be more often legally married than did non-users.

Users also tended to be more often living with their partners (married or common law) than did non-users.

c) Occupation. Users tended more often to be students than did non-users who were more often housewives or working.

d) Education level completed. Users tended more often to have continued studies after grade 12 than did non-users.

e) Number of weeks pregnant when to doctor. Users tended to go to a doctor earlier in their pregnancy than did non-users.

2) Practice

a) Contraceptives ever used. Users had tried out a greater number of contraceptive methods than had non-users.

b) Contraceptive use after stopping contraceptive pills.

Users had used some other method after stopping pills more often than had non-users who stopped pills.

	nothing used	something used
U	0	14
NU	8	1

N = 23

Fisher test of significance:

$P < .005$

$\therefore$ significant at $< .005$ level

Users more often used effective contraceptive methods after stopping pills than did non-users.

	effective contrac.	limited effective contrac.
U	5	9
NU	0	9

N = 23

$X^2 = 4.1071$
$df = 1$

$\therefore$ significant at $< .05$ level

c) Contraceptive errors. Users tended to be more aware of contraceptive errors made in the last year than did non-users.

d) Choosing contraceptive methods. Users tended to talk more often about contraception with their partners than did non-users.

Users shared decision-making about contraceptive choice with their partners more often than did non-users.

	Chosen by self	Both chose
U	8	9
NU	9	1

N = 27

$X^2 = 4.9787$
df = 1
∴ significant at $<.05$ level

e) The patients' need for contraception. Users had intercourse more regularly and frequently than did non-users.

	1-3X/ week	irregular/infrequent
U	16	1
NU	8	5

N = 30

$X^2 = 4.8869$
df = 1
∴ significant at $<.05$ level

Users had more consistant patterns of intercourse frequency around the time of conception than did non-users.

	no change	less frequent
U	16	0
NU	7	6

N = 29

$X^2 = 9.3110$
df = 1
∴ significant at $<.01$ level

f) Ideas about dealing with pregnancy if it occurred.

Users tended to have specifically thought of the possibility of abortion more often if pregnancy occurred than did non-users.

3) Attitude

a) Feelings about using contraceptives. Users tended to feel happier about using contraceptives than did non-users.

Users felt that responsibility for using contraception should be shared with their partners more often than did non-users.

	self respon.	shared respon.
U	3	14
NU	7	5

N = 29

$X^2 = 5.1543$
df = 1

∴ significant at < .05 level

4) Knowledge

a) Total scores on knowledge of contraceptives.

Users tended to have more high scores for contraceptive knowledge than did non-users, who had more low scores.

b) Scores on knowledge of male anatomy and sexual function.

Users tended to have more high scores for knowledge of the male than did non-users, who had more lower scores.

c) Sources of information on contraception.

Users tended to talk less often with parents about sex and pregnancy than did non-users.

Chapter V

DISCUSSION AND IMPLICATIONS

A. Discussion

1) Demographic Characteristics

The most striking observation to be made from the preliminary data is that there appear to be few characteristics common or unique to most of the 30 subjects. The most common situation was that 27 of the 30 had never had an induced abortion before.

Drawing from those characteristics fitting at least two-thirds (20 +) of the subjects, one has a composite picture of an abortion patient between 20-26 years of age (or under 24 years), with no children, having completed some level of high school, who sought medical assistance by the 7th week of pregnancy, and who never had an abortion before.

Looking at those characteristics which fit between one-half and two-thirds (15-20) of the subjects, one adds to the composite picture a marital status of either legally - single (living singly and common law) or living - with - partner (married and common law), and an education level of high school or higher completed.

The occupation item showed the most common characteristic as employed but this group is just under one-half (14) of the subjects.

These demographic data do not differ greatly from those of either the Grauer or Claman studies, though they are

probably a little closer to Claman's group from the same urban centre. The present study's subjects tended to be a little younger and less often legally married.[1,2]

2) Contraception Practice

a) Contraceptives Used. Most subjects had used some form of contraception sometime in the past. The pill was the most frequent individual method used at some time but more of the subjects (over one-half) had used methods of limited effectiveness.

Just over half of the subjects (17) reported using a contraceptive at the time of conception. This number is similar to Grauer's findings that 57% of his subjects had used contraceptives at the time of conception.[3] The most common individual method used by the group of 17 was a spermacide. Over half of the group used methods of limited effectiveness.

b) Consistancy of Contraceptive Use. Almost two-thirds of those who had ever used contraceptives were aware of making errors in their use at some time.

Of the 17 subjects who used contraceptives at the time of conception, only 5 knew of an error made in the use.

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[1]H. Grauer, "A Study of Contraception as Related to Unwanted Pregnancy," Canadian Medical Association Journal, 107: 740, October 21, 1972.

[2]A. David Claman, et al, "Impact on Hospital Practice of Liberalizing Abortions & Female Sterilizations," Canadian Medical Association Journal, 105: 38, July 10, 1971.

[3]Grauer, op. cit., p. 740.

However, combining those who knew they had used no contraceptive with those who identified their contraceptive error at conception, it is evident that well over half (18) of the subjects could identify the contraceptive use problem involved in their pregnancy.

Of the 12 who could not identify their contraceptive error at conception, 5 reported having an IUD (3 used the IUD alone and 2 combined it with a spermacide). Since the subject has little to do with the use-effectiveness of the IUD, these instances may be considered contraception failure. Few of the subjects indicated knowledge of how to check for the presence of the IUD. It could be questioned how often this technique is taught to IUD users.

Data specific to pill use indicated that over two-thirds (23) of the subjects had used contraceptive pills at some time and had stopped them most often because of side effect problems. Only 5 of these 23 subjects switched to another effective contraceptive, an IUD. Thus, over two-thirds of the "pill-stoppers" moved to less effective contraception. This number is similar though somewhat less than the 90% who switched from the pill to less effective methods in Bracken's study.[4]

c) Contraceptive Choice. Although two-thirds of the subjects reported talking with their partners about contra-

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[4]Michael B. Bracken, et al, "Contraceptive Practice Among New York Abortion Patients," American Journal of Obstetrics & Gynecology, 114: 975, December 1, 1972.

ception, over half also stated they chose their contraceptive themselves. Thus contraceptive choice was, in reality, a responsibility of the woman.

The characteristics most desirable in a contraceptive method were given as ease and convenience of use, and reliability.

d) Need for Contraception. Over two-thirds of the subjects reported having intercourse regularly and fairly frequently, and thus were needing regular contraception. This number also noted no change in intercourse frequency nor knowledge of a condition inhibiting conception in themselves or their partners at the time of conception.

e) Consideration of Failure of Conception. During the past year, over two-thirds of the subjects thought about the possibility of becoming pregnant, and a few less talked about this with their partners. However, over half (17) had not thought through to what they would do if they did become pregnant. Of the 13 who did have some ideas about how they would deal with a pregnancy, most considered the possibility of having an abortion.

f) Summary of Practice Data. The composite picture presented by over half of the subjects concerning contraceptive use is as follows:
an abortion patient who had used contraceptives but ones of limited effectiveness, who was aware of the contraceptive problem leading to her pregnancy, and who had used pills at

some time, stopped, and then switched to less effective methods. She also tended to talk with her partner about contraception but then chose the method herself, looking for ones that were easy to use and reliable. She required contraception regularly, and though she thought and talked about the possibility of pregnancy she seldom considered what she might do if pregnancy occurred.

3) Contraception Attitudes

a) Feelings about the Possibility of Conceiving. The occurrence of pregnancy appeared to have some positive aspects for many of the subjects. Almost all (26) reported they would like to consider having a child sometime in the future and half were pleased to be aware of their fertility.

Although more thought about the possibility of becoming pregnant, half of the subjects actively worried about it while half stated they had not worried. The reasons for this variation in concern were not explored. The most common reasons given for deciding to terminate the pregnancy related directly to the subjects' situation: inconvenient timing to have a child and not being married.

b) Feelings about Using Contraceptives. Almost two-thirds (19) of the subjects felt that the responsibility for contraception should be shared by herself and her partner. However, over one-half reported making contraception choices by themselves, a situation which could have caused these subjects to resent having the responsibility.

This discrepency may also relate to the data that only one-half of the subjects reported being happy about using contraceptives while one-third stated they specifically disliked using them.

Adding to the apparent inconsistancy in feelings about using contraception, two-thirds of the subjects reported being comfortable talking about contraceptives while only one-third were not.

c) Feelings about Contraception and Sexual Role. Most subjects (26) reported they usually enjoyed having intercourse. Despite some negative feelings about using contraceptives as reported above, two-thirds of the subjects stated their enjoyment of intercourse was unaffected or increased when using contraceptives. Also, over two-thirds of the subjects reported feeling comfortable talking about sexual matters, a similar but larger number than those who were comfortable talking about contraception.

d) Feelings about Abortion. Most of the subjects viewed availability of abortion as necessary to deal with failed contraception and birth control. However, although over two-thirds of the subjects reported they rationally accepted the idea of having an abortion for themselves, two-thirds also noted their unhappiness about having it.

e) Summary of Attitude Data. A composite picture of the more frequent attitudes of the subjects is as follows: an abortion patient who wants to have a baby someday, but

decided against keeping this pregnancy because the timing was inconvenient or she was not married. Her feelings were ambivalent about the possibility of pregnancy and about having to take responsibility for contraception. She was also ambivalent about using contraceptives though her enjoyment of intercourse was not usually affected by their use.

The tendency to ambivalence concerning some aspects of contraceptive utilization reflects the ideas about difficulties arising from sexuality problems as discussed by several of the authors reported in the literature.[5] [6] [7] It is suggested that a person who is uncomfortable with their sexuality and who dislikes or resents using contraceptives, may not use them well.

4) Contraception Knowledge

a) Knowledge of Contraceptives. Although over two-thirds of the subjects were able to list at least 4 methods of contraception, contraceptive knowledge scores indicated that few had complete knowledge of these methods. The largest group of subjects (14) scored between 50% - 75% correct knowledge. Just under one-fourth of the subjects scored between 75% - 100%, but another quarter scored between 0 - 50%. These

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[5] L.P.O. Tunnadine, Contraception & Sexual Life (London: Tavistock Publications, 1970), pp. 37-41.

[6] Nancy Garrett, "Choosing Contraceptives According to Need," The Canadian Nurse, 68: 40, September, 1972.

[7] James G. Hill, "Birth Control Usage Among Abortion Patients," Kansas Medical Society Journal, 73: p. 298, June, 1972.

data coincide with the Weiner and Davis study in which very incomplete knowledge of specific contraceptive methods was indicated by the subjects.[8]

Of the four specific questions concerning knowledge of contraceptive function, use, problems, and effectiveness, the answer scores were generally higher for the practical knowledge of use and effectiveness, and lower for the depth understanding of function and problems.

b) Knowledge of Conception. Total scores for knowledge of conception followed a pattern similar to that of contraceptive knowledge. Complete knowledge was rare. The largest group of subjects had scores between 50 - 75% correct knowledge with substantial groups in the ranges of 0 - 50% and 75 - 100%.

On the individual questions, the subjects indicated better knowledge of female than of male anatomy and function. Also, over two-thirds indicated incomplete or no understanding of how to estimate the average female fertility period. This finding is similar to Goldsmith's who reported that subjects using the rhythm method often did not know when their fertility period probably occurred.[9]

c) Knowledge of Abortion. Generally, knowledge con-

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[8]Enid Weiner & Judith Davis, "Provisional Study of a Group of Unmarried Mothers in the City of Vancouver: Some Social Characteristics, Knowledge of Attitudes Towards & Practice of Contraception," (unpublished paper, University of British Columbia, 1969). p.5.

[9]Sadja Goldsmith, et al, "Teenagers, Sex & Contraception," Family Planning Perspectives, 4: 37, January, 1972.

cerning abortions was limited. Although over two-thirds of the subjects knew that abortions could be performed legally, most did not know how readily available they were. Over half had only vague knowledge of the abortion procedure and the same number knew little or nothing about problems related to abortions.

d) Sources of the Contraception Knowledge. The subjects listed a variety of sources for information but no one source appeared to be particularly useful. Just over half (16) of the subjects listed their partners or reading materials as their best source of information on sexual relations and pregnancy. Almost three-quarters (19) listed reading materials or their doctors as their best source of information on contraception. It was interesting to note that many subjects suggested schools could be the most appropriate and useful source of such information.

Parents did not show as useful or comfortable sources of sexual or contraception information. Over half of the subjects reported they did not talk with their parents about sexual relations and over three-quarters did not talk with parents about contraception.

e) Summary of Knowledge Data. A composite picture of the subjects' contraception knowledge level is as follows: an abortion patient who was aware of several methods of contraception but whose knowledge of these methods was incomplete and superficial. Her knowledge about conception was also incomplete, being better about the female role than the

male though very poor concerning an understanding of the female fertility period. About abortions, her knowledge was also limited concerning availability, the abortion techniques, and associated problems.

She learned about sexual relations and pregnancy mostly from her partner and reading materials, and about contraception mostly from reading materials and her doctor. Her parents were a poor source of information and she was uncomfortable talking with them about sexual matters.

It was noted in the literature review that information concerning adequacy of contraception knowledge was inconclusive but did suggest that such knowledge was often limited. This study supports the suggestion that knowledge is often incomplete.

5) Subjects' Explanations

The largest number of subjects providing a common explanation for the occurrence of their pregnancies indicated that they unrealistically avoided consideration of the possibility of pregnancy arising from their sexual relations. This suggests that a major problem with contraceptive utilization is in the area of dealing directly with the reality of sexuality and implications of sexual contacts.

Two other notable problem areas were contraception failure and ignorance concerning contraceptive methods. These two explanations by the subjects have some support from the data. Five of the subjects specifically reported contraception failure with IUD's and the level of contraception

knowledge was limited for most subjects.

6) Comparison of Contraceptive Users & Non-Users

The variables showing statistically significant differences between the users and non-users of contraceptives at the time of conception provide the following pictures of the two groups.

The users, numbering 17 out of 30, were older, had more regular and greater need for contraception, showed a pattern of more effective contraceptive choice, and wished to and did share responsibility for contraception with their partners. It is notable that 5 of these 17 subjects were using IUD's and so could be classed as examples of contraception failure.

The non-users, numbering 13 out of 30, were younger, had more irregular and infrequent need for contraception, showed a pattern of ineffective contraceptive choice, and did not wish to and did not share responsibility for contraception.

The variables showing notable differences but not at significant levels between contraceptive users and non-users add as follows to the pictures of the two groups. The users tended to be either legally married or living with their partners, and to be more highly educated and often still students. They tended to seek medical assistance early in their pregnancies. They often had tried several contraceptive methods, were happy using contraceptives, and were aware of contraceptive errors. They had considered abortion if error occured. Their knowledge of contraceptives and of

male sexual function tended to be fairly good and their parents were not usually good sources of contraception information.

The non-users tended to be not legally married and living alone. They were usually housewives or working and less well educated acedemically. They tended to go to the doctor later in their pregnancies. Generally, they had tried fewer contraceptives, did not like using them, were not aware of contraception errors, and seldom had specific thoughts about what they would do if error occurred. Their knowledge of contraceptives and of male sexual function tended to be poor and their parents were usually considered their main source of contraception information.

These two groups of subjects having the same need for abortion differ considerably in many characteristics. This suggests that contraception problems may be complex and varied in their development.

7) The Study Design

a) The Approach. The use of only one interviewer to gather data had advantages of convenience and lack of interpersonal variations in interview technique. However, it did not provide a check for biases in the single interviewer's approach nor for shifts in that approach as the interview process became more routine to the interviewer.

The use of a questionnaire to structure the interview provided consistancy in the data collected and in coding those data. A non-structured interview might have lead to a broader range of data but consistancy would have been limited and

analysis difficult.

Consideration of an even more structured approach, such as a self-administered questionnaire, might have been useful. This approach would have, while limiting the range of information gathered, provided even more consistancy, facilitated testing for validity and reliability, and provided a more private format for the subjects to answer questions with which they might have felt uncomfortable.

b) Setting. Initial contact with the subjects had to be made on an open ward where all the patients were having abortion procedures. The lack of privacy while explaining the study procedure appeared to lead to the researcher's discomfort more than the patients'.

The interview itself took place in a quiet conference room kindly provided by the ward staff. The subjects were generally most co-operative and receptive. They frequently stated they were pleased to have something to do during the long, quiet evening before the abortion next morning. Their continued co-operation may have been facilitated by the interviewer offering to answer any questions and explain procedures after the questionnaire was completed.

c) Population and Sample. The sampling procedure was carried out without difficulty and as planned. The response rate of 90.9% is sufficient to have confidence in the data.[10]

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[10]David J. Fox, Fundamentals of Research in Nursing (New York: Appleton - Century - Crofts, 1970), p. 177.

d) The Tool. Approximately three quarters of an hour was necessary to administer the questionnaire by interview. Most of the questions elicited answers readily but some of the lists of possible answers did not fit well with the data received. This required that answers be written in during the interview and that coding be adjusted to accommodate the unanticipated answers. Preliminary testing with more subjects could have prevented this situation.

The items on contraception practice sought and generally elicited straight-forward data which provided some clear answers to the practice part of the research question.

Design of items on contraception attitudes was difficult due to the lack of examples from the literature and to the difficulty of identifying subjective feeling states behaviourally. The data related to the attitude part of the research question thus indicated possible trends but no clear answers.

The items on contraception knowledge usually were fairly complex requiring verbal recall answers. A larger number of well developed, single question, multiple choice items could have facilitated clearer testing of more specific units of knowledge. Coding of answers would also have been easier and probably more consistant. These data, therefore, indicated some answers to the knowledge part of the research question but did not clearly identify problem areas.

B. Implications

1) General

The results of this study suggest that abortion patients are a varied group in relation to age, marital status, occupation, and education level. Thus, any attempt to reduce the need for abortions through contraceptive utilization should not be limited as to approach, to whom it may be directed, nor by whom it may be carried out.

2) Contraception Practice

Contraceptives are widely needed and used. They therefore need to be readily available in a manner which ensures their effective use. The availability of contraceptives was not considered in this study but needs to be described in future research if a total understanding of contraceptive utilization is to be gained. The comfort and intelligent skill necessary for effective contraception will depend on the user's attitudes and knowledge. Specific implications from this study's data on these factors will follow.

Technical problems with contraceptives cause many difficulties. Few methods are highly effective even given correct use and all methods have potential for human error in use. Users therefore need to be well and comfortably informed as to effectiveness, use, function, and problems in order to make contraceptive choices suitable to individual needs.

Given this failure potential of presently available contraceptives, promotion of the development of safer, more effective, and convenient contraceptives is of importance. Also necessary is a realistic consideration of the role and safety of abortion as a back-up for inevitable failures in contraception.

The apparent limited sharing of contraception decision-making and discussion of potential problems of pregnancy by sexually active couples is notable. Further study is indicated as to the implications of these situations for both contraceptive utilization and the much broader area of communication between partners.

3) Contraception Attitudes

Although more and better studies are needed for a clearer understanding of the effects of attitudes on contraceptive use, the conflicts and ambivalence that were apparent in this study's subjects suggests problems in this area. Concerns about when to have desired children and about sharing of contraception responsibilities indicate the necessity of trust and openness between sexually active couples. Conflicts about using contraceptives while acknowledging the enjoyment and importance of sexual relations indicate the need for acceptance of personal sexuality.

Approaches to these problems could be made through programmes on human sexuality and communication designed to desensitize and inform people concerning their sexuality. Such programmes may be beneficial first for professional people such as nurses, doctors, social workers, and teachers who are seen and used as resources for dealing with sexuality problems and education. These programmes would also be beneficial for parents as they help their children deal with their developing sexuality.

Other possible means to influence healthy contraception attitudes include: well developed school programmes

on family life and sex education, identification and treatment of sexuality problems by family physicians and other primary care workers, and thorough assessment and education for people requesting contraceptives.

4) Contraception Knowledge

Two important issues may be drawn from the data on contraception knowledge. First, knowledge of the subjects concerning contraception was often incomplete. Second, parents appeared to have been poor sources of information and no consistant and effective resource replaced them.

This suggests the need for specific and formal programmes to provide contraception education. Such programmes can probably be most economically provided in schools, though efforts to reach adults, including especially parents, would be useful and important. The development of programmes within the context of sexuality education, family life education, and communications education would provide a healthy and realistic framework for contraception education.

5) Future Studies

Further research would be useful in most areas covered by this study in order to check and follow up on the results reported here. Reliability and validity testing would be necessary if the tool developed for this study were to be used again.

Studies in greater depth for each aspect of the research question could provide better understanding of contraception practices and the influence of attitudes and know-

ledge. Comparative studies with non-abortion subjects of child-bearing age are necessary to identify any unique characteristics of the abortion patients. Experimental studies may now be indicated to test out approaches to deal with some of the problems of contraceptive utilization.

Finally, it is evident from the literature and general observations that attitudes and practices concerning sexuality are shifting and changing in our society. No one description of contraceptive utilization nor any single preventive or treatment method is going to identify or solve all problems. Constant re-assessment and planning is necessary if good contraceptive health care is to be available.

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Appendix A

QUESTIONNAIRE AND INTRODUCTORY MATERIAL

An Exploratory Study To Identify Preconception Contraceptive Patterns of Abortion Patients

Age ___

Civil Status:

single - parents ___

on own ___

common law ___

married ___

separated ___

divorced ___

Number of children ___

Occupation _____

Education completed _____

Number of weeks pregnant when to doctor ___

Number of previous abortions ___

1) <u>What contraceptives have been used - by whom</u>

1. Here is a list of contraceptives commonly used. What methods have you or your (partner) used in the past year to prevent pregnancy?

__ withdrawal
__ rhythm
__ condom
__ diaphragm
__ spermacide
__ douche
__ IUD
__ pill
__ TL
__ vasectomy
__ nothing
__ _____

2. Were you using any of these methods around the time you became pregnant? Which ones?

_____
_____
__ none

2) <u>With what consistancy contraceptives have been used</u>

--- N/A if never used __

1. Most people at some time miss using their contraceptives. Can you describe any slips you have made in the past year with your different contraceptives?

__ forgot pills occasionally
__ IUD expelled - not checked
__ used irregularly by self
__ used irregularly by partner
__ out of supplies - no substitute
__ wanted baby
__ no slips, errors
__ _____

2. Can you explain what happened with your contraception when you became pregnant?

method _____
error _____

--- specific re: pill.

3. Many people use the pill for contraception at some time and then stop. Have you done this?

__ yes
__ no

--- specific re: sometime pill user.

4. Could you tell me why you stopped using the pill when you did?

__ concerned re: safety of pill
__ side effects
__ to take a break from constant use
__ to have a baby
__ _____

5. What contraceptive did you use right after you stopped taking the pills?

_____

__ none

3) How were contraceptive methods chosen - by whom, why

--- N/A if none used __

1. I am interested in knowing a little about how you come to choose your contraceptives. Do you and your (partner) talk about using contraception?

__ yes
__ no
__ occasionally
__ _____

2. When a contraceptive method was chosen, who made the decision on what to use?

__ self
__ partner
__ both

3. What were the reasons for liking the contraceptives you chose to use?

_____	_____
__ easy, convenient	__
__ reliable	__
__ safe for health	__
__ accept. for religion	__
__ doctor recommended	__
__ partner recommended	__
__ used by male	__
__ only method known	__
__ no connection with intercourse	__
__ _____	__

4) What has been the patient's need for contraception

1. The kind of contraceptive that is most suitable for a person may depend on how much she needs it. Can you tell me approximately how regularly you have had intercourse during the past year?

__ nearly every day
__ 2-3 times a week
__ about once a week
__ 2-3 times a month
__ very occasionally
__ _____

2. Can you remember any changes in your usual pattern of intercourse around the time you became pregnant?

__ no
__ less frequent
__ more frequent
__ more regular
__ more irregular
__ _____

3. Do you or your (partner) have any condition that may decrease your chance of becoming pregnant?

__ no
__ TL
__ ovarian abnormality
__ uterine abnormality
__ vasectomy
__ _____

5) What plans the patient had for failed contraception

1. Whenever you had intercourse during the past year, did you think very often about the possibility of becoming pregnant?

__ never
__ occasionally
__ often
__ _____

2. Did you talk about the possibility of becoming pregnant with your partner?

__ yes
__ no
__ occasionally
__ _____

3. What ideas did you have of what you would do if you became pregnant?

__ no ideas
__ keep baby
__ adopt out baby
__ go away for a while
__ have an abortion for sure
__ have an abortion perhaps
__ _____

6) <u>What feelings the patient has had about conceiving</u>

1. Do you want to have a baby sometime in the future?
   - __ yes
   - __ no
   - __ perhaps
   - __ don't know

2. In the past year, how much did you worry about becoming pregnant when you had intercourse?
   - __ very worried all the time
   - __ worried sometimes
   - __ did not worry
   - __ _____

3. Could you tell me why you decided not to continue this pregnancy?
   - __ do not want any children
   - __ do not want more children
   - __ too close to last pregnancy
   - __ not a convenient time
   - __ not married
   - __ unable to support child
   - __ family pressure
   - __ pressure from partner
   - __ medical problem
   - __ too demanding on self
   - __ _____

4. Is there any satisfaction for you to know that you are able to become pregnant?
   - __ pleased to know
   - __ indifferent
   - __ unhappy
   - __ _____

7) What feelings the patient has about using contraceptives

1. Referring to contraceptives again, who do you feel should take responsibility for using contraceptives in your relationship?

__ self
__ partner
__ both
__ _____

2. In general, do you have any feelings of like or dislike about the idea of using contraceptives?

__ no thoughts
__ happy to use
__ do not like to use
__ indifferent re: use
__ _____

3. How comfortable do you feel about talking of and arranging for contraceptives?

__ very comfortable
__ indifferent
__ uncomfortable
__ _____

8) <u>What feelings the patient has about contraception and sexual role</u>

1. How is your enjoyment of sexual relations affected by using your most recently used contraceptive?

_____

__ no effect
__ more relaxed with
__ more relaxed without
__ no ideas
__ _____

2. Do you generally get enjoyment out of your sexual relations?

__ very enjoyable
__ usually enjoyable
__ sometimes enjoyable
__ seldom enjoyable
__ never enjoyable
__ _____

3. How would you describe the basic importance of sexual relations for you?

__ expression of love, feeling
__ pleasure for self
__ pleasure for partner
__ to have children
__ part of marriage
__ _____

4. How comfortable is it for you to talk about sexual things?

__ comfortable
__ uncomfortable
__ indifferent
__ _____

9) What feelings the patient has about abortion

1. There has been a lot of thinking lately about the connection between contraception and abortion. How necessary or important do you feel abortion is as related to contraception?

__ necessary as a contraceptive
__ unfortunately necessary for failed contraception
__ should not be necessary
__ _____

2. Could you tell me a little about how you are feeling about having this abortion?

__ comfortable about having
__ do not like, uncomfortable
__ do not like, but accept
__ indifferent
__ _____

3. Do you mind whether you are awake or asleep during this surgery?

__ want to be asleep
__ would like to be awake
__ do not care
__ _____

10) What the patient knows about contraception

--- People sometimes do not know a lot about contraceptives and it seems important for nurses to find out what women know so we can answer questions better. I have some questions about how different methods work, and I would be pleased to answer any questions you have after we finish this.

1. Looking at the list of contraceptive methods, which of these methods have you used or heard of before?

--- consider up to 4 methods with which the patient is familiar.

2. Would you tell me anything you know about how _____ works to prevent pregnancy?

3. Would you tell me what you have heard about how _____ is used?

4. What sort of problems do you know about using _____, problems that may make it less popular to use?

5. How would you rate _____ for preventing pregnancy?

- very effective
- effective most of time
- sometimes effective
- questionable - no effect

method	function	how to use	problems	effectiveness
1.				
2.				
3.				
4.				
1.				
2.				
3.				
4.				

11) <u>What the patient knows about conception</u>

--- I have diagrams of male and female reproductive anatomy - which show something of what it is like inside a woman and a man.

1. With the female diagram, would you tell me the names of the different parts and what they have to do with producing a baby?

__ correct
__ incomplete/incorrect
__ don't know

2. Also, with the male diagram, could you tell me the names of the parts and what they have to do with producing a baby?

__ correct
__ incomplete/incorrect
__ don't know

3. If a woman has a regular 28 day menstrual cycle, how many days after the first day of her period is pregnancy most likely?

__ shortly before/after period
__ middle time between periods
__ 12-16 days (2 weeks) after
__ 8-11 days after
__ 17-20 days
__ don't know
__ _____

12) What the patient knew about abortion, preconception

1. Before you became pregnant did you know whether abortions were legal or illegal?

__ legal
__ illegal
__ did not know

2. Could you tell me what you knew about how available abortions were, before you became pregnant?

__ easy to arrange
__ available for health only
__ available for economics
__ available on request
__ perhaps available
__ nothing known
__ _____

3. Before you became pregnant, what did you hear about how abortions were done?

__ D & C
__ saline induction
__ scraped out
__ suction, vacuum
__ nothing known
__ _____

4. Before you became pregnant, can you describe anything you heard of about possible problems with having an abortion?

__ few problems
__ no problems with legal abortions
__ dangerous if illegal
__ bleeding
__ pain
__ infection
__ decreased fertility
__ problems carrying future pregnancy
__ more problems if abortion late
__ nothing known
__ _____

13) <u>The source of the patient's information concerning contraception</u>

1. What were all the places or people where you learned about sexual relations and pregnancy?

__ mother
__ father
__ siblings
__ friends
__ partner
__ nurse
__ SW
__ doctor
__ school class
__ f.p. clinic
__ magazines
__ books
__ nowhere
__ _____

--- where did you learn the most? _____

2. What were all the places or people where you learned about contraceptives?

__ mother
__ father
__ siblings
__ friends
__ partner
__ nurse
__ SW
__ doctor
__ school class
__ f.p. clinic
__ magazines
__ books
__ nowhere
__ _____

--- where did you learn the most? _____

3. When you were with your parents:

--- did you talk about sex and pregnancy with them?

__ yes
__ no
__ _____

--- did you talk about contraceptives with them?

__ yes
__ no
__ _____

--- how comfortable were you and your parents talking about sexual things? _____

14) <u>What is the patient's own explanation for the occurance of this pregnancy</u>

1. This is the last question that I have. To sum up, what do you see was the main, general reason you became pregnant now? _____

Explanation to Patients

My name is Judy Watts and I am a Registered Nurse working toward a Master's degree at University of British Columbia. I am doing a study with patients coming to this hospital for abortions. I hope to learn about their problems and concerns with using contraceptives so that, in future, nurses can help women to understand more about effective contraception.

I would be pleased if you would help me with this study by discussing and answering some questions. You are free to decide whether to participate, and to withdraw at any time in our discussion if you wish.

Very briefly, I would like to talk to you of some of the things you know about contraception, of what contraceptive methods you may have thought of or used, and of your feelings about contraception. This discussion should take about three quarters of an hour this evening.

Each person I will be speaking to has been selected randomly, by chance, from all the patients admitted today. No name or any other form of identification will appear with the information gathered, so that everything you say will be completely confidential and anonymous.

The nursing administration of the hospital has given me permission to approach you. If you are willing to talk with me, I will need your signed consent.

Consent Form

I, _____, have been requested to participate in the study entitled "An Exploratory Study to Identify Preconception Contraceptive Patterns of Abortion Patients."

I understand that to participate, I will be interviewed by Judy Watts, R.N., and that the interview will take about three quarters of an hour.

I understand that questions will be asked about what I know of contraception, what contraceptives I have used, and my feelings about contraception.

I understand that my name will not appear on any of the materials and that the information gathered will be confidential.

I further understand that I am free to withdraw from the interview at any time.

I hereby give my consent to participate in this study.

Signed:

Date:

APPENDIX B
TABLE I
DEMOGRAPHIC DATA

N = 30

		Number				
		1 2 3 4 5	6 7 8 9 10	11 12 13 14 15	16 17 18 19 20	21 22 23 24 25 26 27
Age	16	x				
	17	x x x				
	18	x				
	19	x x				
	20	x				
	21	x x x x x				
	22	x x x				
	23	x x x x				
	24	x				
	25	x x x				
	26	x x x				
	28	x				
	30	x				
	37	x				
Marital Status	Married	x x x x x	x x x x			
	Common-law	x x x x x	x x x			
	Single	x x x x x	x x x x			
	Separated	x x x				
	Divorced	x				
	with partner	x x x x x	x x x x x	x x x x x	x x	
	without partner	x x x x x	x x x x x	x x x		
Children	0	x x x x x	x x x x x	x x x x x	x x x x x	
	1	x x x x				
	2	x x x x				
	4	x				
	5	x				

N = 30

		Number																								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Occupation	student	x	x	x	x	x	x	x	x																			
	HW	x	x	x	x	x	x	x	x																			
	working	x	x	x	x	x	x	x	x	x	x	x		x		x												
	working-professional	x																										
	business/clerical	x	x	x	x	x	x	x																				
	skilled labour	x	x	x																								
	unskilled labour	x	x	x																								
Education Level	grades < 8	x	x	x																								
	9	x																										
	10	x	x																									
	11	x	x	x	x	x	x																					
	12	x	x	x	x	x	x	x	x	x	x	x																
	>12	x	x	x	x	x	x	x																				
Previous Abortions	0	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	1	x	x	x																								
Weeks Pregnant when to Doctor	3	x	x																									
	4	x	x	x	x	x	x	x	x																			
	5	x																										
	6	x	x	x	x	x	x																					
	7	x	x	x																								
	8	x	x	x																								
	9	x	x																									
	10	x	x																									
	13	x																										
	14	x																										
	17	x																										

APPENDIX C

TABLE II

SCORES FOR EACH QUESTION ON KNOWLEDGE OF CONTRACEPTION

	scores	Numbers									
		0	1	2	3	4	5	6	7	8	9
1) knowledge of contraceptive function	0	x	x	x	x	x	x				
	1	x	x								
	2	x	x	x							
	3	x	x	x	x	x					
	4	x	x	x							
	5	x	x	x	x	x	x				
	6	x	x	x	x	x					
	7	x	x	x	x	x					
	8	x	x	x	x						
2) knowledge of contraceptive use technique	0	x	x	x	x						
	1	x	x								
	2	x									
	3	x	x	x	x						
	4	x	x	x	x	x					
	5	x	x	x	x	x	x	x	x	x	
	6	x	x	x	x	x					
	7	x	x	x	x	x	x				
	8	x	x	x							
3) knowledge of problems with contraceptive	0	x	x	x	x						
	1	x	x								
	2	x	x	x							
	3	x	x	x							
	4	x	x	x	x	x	x	x			
	5	x	x	x	x	x	x	x	x	x	
	6	x	x	x	x	x	x				
	7	x	x	x							
	8	x	x								
4) knowledge of effectiveness of contraceptive	0	x	x	x	x	x					
	1	x	x	x							
	2	x									
	3	x	x								
	4	x	x	x							
	5	x	x	x	x	x	x				
	6	x	x	x	x	x					
	7	x	x	x	x	x	x	x	x		
	8	x	x	x	x	x	x	x	x		

APPENDIX C

TABLE II

SCORES FOR EACH QUESTION ON KNOWLEDGE OF CONTRACEPTION

		Numbers									
		0	1	2	3	4	5	6	7	8	9
Total knowledge scores	0 - 4	x	x	x	x	x					
	5 - 8	x	x								
	9 - 12	x	x								
	13 - 16	x	x	x	x						
	17 - 20	x	x	x	x	x	x	x	x	x	
	21 - 24	x	x	x	x	x	x	x			
	25 - 28	x	x	x	x	x	x				
	29 - 32	x	x	x							