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THE HISTORICAL DEVELOPMENT OF THE DISCUSSION OF ETHICAL ISSUES ASSOCIATED WITH THE USE OF DONOR SPERM.

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PURPOSE

The purpose of this report is to document the emergence, the development and discussion of the ethical issues associated with the use of donor sperm in the treatment of childlessness. The report is the result of a literature survery of the following databases/bibliographies.

1. Medline 1980 - June 1990
2. Family
3. APAIS
4. Philosophers Index 1940 - March 1990
5. A bibliography "Artificial Insemination by Donor" Ken Daniels and John Fairweather 1983.

All the articles reviewed were in English and available within Australia. Articles which were only available overseas were not collected.

INTRODUCTION

The treatment of childlessness by the technique of artificial insemination using the husband's sperm (AIH) has been used for more than 200 years. The use of donor sperm (referred to as AID, TID or more recently as DI) where the husband's infertility is resistant to medical treatment (eg. azoospermia, asthenospermia or severe oligospermia) has been in use for at least 100 years. There is considerable disagreement in the literature as to when each of these techniques was first used and also as to who first used them.

The following have been credited with the first time use of artificial insemination techniques:

AIH

YEAR	WORKER	REFERENCE
1770	John Hunter	(1984) W. Beck (1)
1785	John Hunter	(1954) J. Fletcher (2)
1790	John Hunter	(1966) W. Watters & J. Souza-Poza (3)
1793	John Hunter	(1965) B. Rubin (4)
1799	John Hunter	(1985) R. Levine (5)
END OF 18TH CENTURY	John Hunter	(1967) M. Pollock (6)
1870	John Hunter	(1973) B. Tekavcic (7)

DI

YEAR	WORKER	REFERENCE
1864	Not stated	(1976) A. Bonythorn (8)
Pre 1883	Not stated	(1973) O. Stone (9)
1884	Pan Coast	(1973) B. Tekavcic (7)
1884	Pan Coast *	(1967) M. Pollock (6)
1884	John Dickinson	(1981) M. Glezerman (10)
1884 but not reported until 1909.	Jefferson Medical College - Philadelphia*	(1966) W. Watters & J. Souza-Poza (3)
1890	Robert Dickinson	(1982) W. Thompson & D. Boyle (11)
1909	Not stated	(1965) H. Peyser (12)
1909	Hard	(1965) B. Rubin (4)
1909	A. Hard	(1982) D. Berger (13)

* Same original ref ie. Gregoire A.T. & Mayer R.C. Fert. Steril 16, 130. 1965.

These discrepancies have been listed because they are indicative of the difference in opinions surrounding the use of artificial insemination since it was first reported in the literature. These differences of opinion are not surprising when one considers the extreme secrecy which surrounded this tecnhique especially when donor sperm was used. It is the historical treatment of the ethical issues such as secrecy that this report seeks to document. The report traces the 4 main strands of thought ie. Medical, Religious, Legal, Psychiatric/Psychological viewpoints.

BEFORE 1941

This literature survey was able to find (10) references in this period, of which 5 were obtained. This paucity of articles was noted by Rubin (1) in which he stated that between 1902 and 1924 only 24 articles dealing with artifical insemination appeared in the medical literature. This was a confirmation of Seashore (2) (1938) who found that only 24 articles most of which were in foreign periodicals had appeared since 1902.

An editorial in the Journal of the American Medical Association 1939 (3) discussed the issue of whether the child conceived by artifical insemination using donor sperm is legitimate. The editorial concluded that there was no clear cut answer and that for the child's protection "false pride or considerations of delicacy" should be put aside and the husband adopt the child. The article stated that the conception was not adulterous. In the previous year the Journal of the American Medical Association 1938 (4) had published a letter which stated that artificial insemination was impractical as well as dangerous. The possibility of blackmail and legal involvements were stated as other reasons against the practice. The practice was considered impractical in that according to the article most male sterility was curable by either operation or endocrine treatments.

Gerard Kelly (5) in 1939 condemned artificial insemination using donor sperm because the parties to the conception were not man and wife. According to Kelly natural law forbids this process. Further Kelly contended that the process does injury to the marriage bond by including a third party, and "violates a sacred equality that should exist between husband and wife with respect to their child". He thus saw donor child as a source of division and jealously. The author compared this to the equal footing an the adopted child. The process was also considered unlawful in that the sperm was obtained by masturbation.

Legal opinions of this period were divided as to the legality of the process. Lord Dunedin (6) in 1924 stated that Fecundation ab extra was adultery.

In the Case of Orford vs. Orford (1921) the judge ruled that "the essence of adultery consists not in the moral turpitude of the act of sexual intercourse but in the voluntary surrender to another person of the reproductive powers or faculties to the guilty person (7).

1941 - 1950

The literature from this period was strongly negative regarding the use of donor sperm insemination. An opening statement in the Virginia Law Review 1948 (1) is typical of this time:- ".....artificial insemination where a third party donor is used, should be immediately condemed" or ".....the undesirable and uncertain consequences resulting from the use of a third party donor in themselves interdict this practice as repugnant to the existing mores of society".

This condemnation was based on the view that the practice was not only unnecessary (adoption being seen as a viable alternative) but contrary to standards of adultery and legitmacy. The concern was that society already weakened by two world wars would be further damaged by the practice. It was thought that the social order which was built on the exclusive marriage of one man to one woman for life was at risk.

The Review had concerns about blackmail, consanguinity, and transference of the wife's affection to the donor. The issue of consent by husband, wife, donor and the donor's wife was raised because of the possibility of the husband having a cause for action or the wife claiming rape. Further it seemed that the essence of the adultery was the introduction into the husband's family of "a false stream of blood".

The Review raised issues such as the status of the child and whether the child had inheritance rights from the social father. It was suggested that secrecy which was highly desired by the parties to DI inhibited a clarification of the childs status by adoption. The issue of whether donor insemination should be available to unmarried women was addressed by saying that it was highly improbable that permission would be granted.

The social results were seen as the strong reason for not allowing AID to unmarried women.

The exclusiveness of marriage was quoted by F. Connell (2) (1945) as an interdiction to AID. Connell stated that the act of AID would be a specific act of adultery which would not be altered by the husband giving his consent. Connell further stated that according to natural law no woman had the right to allow sperm to enter her that was not from her husband. The social aspect of AID was recognised by Connell when he contended that the welfare of society demands that children are born only of the couple. Any violation was harmful to society and a sin against legal justice. Connell added that since the sperm was obtained by masturbation, this would add to the guilt of the procedure. G. Kelly (1947) (3) confirmed this view of the Roman Catholic Church that both the insemination and the method of obtaining the sperm were against the natural law. Kelly stated further that a woman who exercised her procreative power with a donor was acting against divine law. According to Kelly, the act of masturbation made a mockery of the psycho-physical processes present in coitus. Kelly attacked as false the claim that every man had the right to be happy and restated this liberal approach as 'the right to do as one pleases'. Kelly believed that this 'subversive principle' underlay the 'proxy father propogation'.

Pope Pius XII delivered the Catholic view before the Fourth International Convention of Catholic Physicians in Oct '49 in which AID was condemned as immoral and the child as illegitimate.

The use of a third party was immoral because "only marriage partners have rights over their bodies for the procreation of a new life and these rights are exclusive, nontransferable and valuable".

These views were confirmed by the Commission appointed by the Archbishop of Canterbury in 1949 to investigate the issues. The Commission concluded that AID should be condemned because it was "contrary to Christian principles. The Medical Literature from this time continued the negative attitude toward AID. An editorial comment in the New York Journal of Medicine (1948) (4) cited the issues of written consent, the treating doctor liabilities and the childs status as problems associated with AID. This article was rather unique in two of its comments. Firstly, as it stated "It is not merely the success of a technique which must be considered; it is the aftermath which is to be borne in mind" and secondly, it raised the question of according equal privilege to a husband who is pronounced fertile and the wife sterile. It further suggested that a view could be taken that the husband's desire for children may "be satisfied through extraneous sources".

An English editorial in British Medical Journal (1947) (5) called for statutory guidance because of the difficult issues. It was stated that the process was adulterous both for the women and also for the donor. A Health Minister was quoted as saying that the adulterous character cannnot be removed by the consent of the other spouse. Concern was expressed that the doctor stands on insecure legal ground in that a consent form was not a defence and he may himself be charged with rape or serious assault.

The writer expressed a fear that the risk of incest between donor children was appreciable unless the number of children per donor was limited.

The issues surrounding wills and fraud were also canvassed. Fraud on Government revenue was possible because there was a higher duty payable on the succession of an illegitmate child compared to a legitimate child. If the truth was concealed from the child and the child accepted gifts from say the husband's parents on the basis that the child was their son's, fraud may be committed.

It was stated that the consent form must contain an assurance that any claims on the parents wills by a third party would not be defeated by the birth of the AID child.

The dilemma regarding registration of the AID child was discussed. The severe penalties (7 year goal if convicted on indictment) for perjury on the birth certificate on one hand and the fact that if the father's name was not stated the illegitmacy was obvious to all who see the certificate.

A series of Foreign Letters from Regular Correspondent (Paris) to the Journal of American Medical Association (1947) (6) generally damns the practice as adulterous and questioned the "quality of a child born through AID. A Padre Tessor saw the collection of sperm by masturbation as the main reason for questioning the procedure.

To Dr A. Chalier however the practice was "unquestionable" as long as there was anonymity between donor and recipient couple. He believed the husband to be the legitimate father of the child. He further stated that "the action (AID) is ethical if the doctor is asked to perform the procedure by a sterile husband" and "if a much desired maternity would cause disappearance of nervous troubles of the wife which are related to the unsatisfied longing".

An interesting statute from this period is the Sanitary Code of the City of New York. In 1947, a man announced by mail to a number of doctors that he had human sperm available for artificial insemination. The announcement read as follows:-
"We offer semen drawn from healthy investigated professional donors. Suitable types for your patients specifications. Active specimens guaranteed and delivered daily. Confidential service - office hours 5.30 to 7.00pm".

The Commissioner of Health of the City of New York being concerned that this might be a source of spreading infectious diseases took steps to prevent unauthorized and unaccredited people from starting such a sperm bank.

The Sanitary Code of New York was amended as follows:-
"No person other than a physician duly licensed to practice medicine in the State of New York shall collect, offer for sale, sell or give away human seminal fluid for the purpose of causing artificial insemination in a human being except in accordance with the regulations of the Board of Health of the Department of Health of the City of New York" (7).

1951 - 1960

Editorials or letters written in the Medical Journals of this time continued to show disapproval for donor insemination, although not as stridently as previous years. The Journal of the American Medical Association (1951) (1) outlined the different opinions as to whether the child was legitimate and whether the procedures were adulterous.

The editorial concluded that it was doubtful whether the child would inherit from the husband's will and whether the child would be the grandchild of the paternal grandparents. This concern was a continuation of the theme expressed in the period 1941 - 1950. This concern about relationship between the grandparents and the child especially as to as inheritance lapsed after this period.

Three years later in 1954 J.A.M.A. (2) reviewed the findings of a Danish Committee on AID. The writer pointed to the awesome responsibilities placed on the doctor by the proposed legislation. These responsibilities included the choice of a donor and to determine the suitability (as regards qualifications to educate and maintain a child) of any unmarried woman who seeks insemination. The writer doubted whether a gynaecologist would have the skills necessary to carry out these responsibilities and suggested a psychiatrist should be employed. The proposed legislation made provision for limiting the number of inseminations required of a donor and stated that the doctor must not be the donor.

A committee member, Doctor Finger, noted that the Committee had failed to provide for the unmarried man who wanted a child by AID.

The Lancet (1960) (3) reviewed a Departmental Committee findings on Human Artificial Insemination. This Committee was divided between tolerance for and disapproval of the procedure with the majority seeing the practice as undesirable. Further a majority saw AID as immoral conduct and a grave offence against society and the intended child. It is of interest that even though the Committee said that 'a wife who receives the seed of another man goes against the essential nature of marriage', they did conclude that AID was not adultery. The Committee felt that without the husband's consent, AID would be grounds for divorce. The Committee approached the questions of AID more on considerations of risks such as the need to determine stability of marriage, or that the couple recognise their responsibilities to the child, than on matters of principle.

The Committee was unanimous on rejecting AID for single women, widows or separated women.

The softening of medical disapproval was evident in a paper by Kleegman (1954) (4) in which the substitution of the word "therapeutic" for "artificial" was suggested. Fletcher (5) suggested that this alteration would show AID to be a constructive and corrective procedure and not merely a mechanical and arbitrary treatment.

Kleegman briefly reviewed the various churches viewpoints and legal uncertainties such as whether or not the practice was adulterous or whether or not the child was legitimate. Kleegman made no comment on these areas but concentrated on how the doctor should conduct the practice of AID. This was the first reference to lay out an extensive protocol to cover the physicians approach, patient criteria, choice of donor, technique, and results.

In Kleegman's opinion, one of the great values of AID was the anonymity existing between the donor and the recipient couple. Another was that friends and relatives were unaware that the child was not the husband's biological child. Thus the writer strongly advised complete anonymity and the couples are counselled against legal adoption for this would only bring the facts into the open and according to Kleegman this would be a threat to the child's emotional adjustment.

Couples were cautioned against sharing confidence regarding AID with anyone - friends or relatives. Kleegman admitted that a legal problem existed regarding how the birth should be registered. If the treating doctor listed the husband as the father legal fraud was committed. She suggested that the pregnant woman should be referred to another obstetrician who would fill out the birth certificate and as a matter of course name the husband as the father. How this deceit circumvented the fraud law was not explained.

The writer charged the physician with various responsibilities. These included a consideration of the possible effects on the child, the couple and the community. The welfare of the community was seen as the top priority.

An acceptance criteria for patients was suggested. In general the standards were comparable to those used in adoption. If the doctor was unsure of the couples suitability a referral to a psychiatrist was necessary. It was recommended that the pros and cons of donor insemination be openly discussed both with the couple and each partner separately. Such issues as possible future natural conception and disappointment at failure to conceive were fully discussed. It was stated that often AID was asked to be done without the other partners knowledge. Even though the motivation was appreciated, it was absolutely refused

since "a marriage which could not withstand the truth", or "a person too immature to come to terms with reality presents a contraindicator to this therapy". This recommendation is interesting in light of the other recommendation not to tell anybody else about the procedure.

The article called the choice of a donor "a grave responsibility and an ardous task for the physician". The use of known donors from among relatives or friends of the husband or wife was described as dangerous and not recommended. The dangers were not elaborated upon. The doctor retained absolute choice in a donor. Donors were sometimes selected from the husbands of fertile patients but never if the wife was sterile as this would increase her sense of inadequacy.

This last statement indicated a sensitivity not evident in many other articles prior to this time. It also indicates that the writer expected the donor to discuss his donation with his wife or that the physician interviewed the donor and his wife. This is not clear from the paper but does indicate a broadening of the ideas about the impact of sperm donation.

A further sense of the broadening of ideas is gained by the recommendation that intercourse be undertaken after insemination by the recipient couple "to give the sperm a boost". It is believed that this would enhance the husband's sense of participation. - It is this realisation that the recipient husband needed to feel involved that is considered a breakthrough.

It was suggested that mixing the husband's sperm with the donor's sperm could enhance the sense of participation. The article concluded that whether the procedure was good or bad should be decided on by the results although the writer believed that "it would be a cruel deprivation to families and society to prohibit a procedure which results in so much total good".

This period saw the publication of Fletcher's (5) significant book Morals & Medicine in which this Protestant Clergyman made a major examination of the moral validity of artifical insemination. He captured the essence of the then situation when he stated "as a problem of means, distinguished from the ends we seek, it catches us as nearly unprepared as the atom bomb did in the matter of mass extermination and warfare. As an unresolved question, artificial insemination is troubling consciences in the churches, in the courthouses and in medical societies".

Fletcher was concerned about (1) the rights of the marriage partners, (2) the rights of the donor and his wife if he was married and (3) the rights of the child to be born by donor insemination. This was the first time that any commentator had directly suggested that the donor as well as his wife may have rights.

Fletcher began by outlining the Protestant, Jewish and Roman Catholic church views, and various legal considerations on the subject. His statement that there had been very few serious papers written outside of medical literature and that most of these were not concerned with the primary ethics of AID indicated the gaps present before this time.

Fletcher stated the main objections to DI are as follows:-

1. That it was stud breeding.
2. That it was a sin against nature since that husband had not naturally produce the conception.
3. That it was an adulterous practice and thus made the children illegitimate. It was therefore an injustice to the children.
4. That it was evil and would lead to scientific inhumanities.

Fletcher stated that medical science motivation is to fulfil human values and since it gave men more control over health, it raised men to a higher moral level Fletcher doubted whether AID would ever be used by those who could use the natural method. He attacked the Catholic view on masturbation. Firstly, Fletcher believed Onan was punished for his deception not for the method he used and the word "effeminate" cited by Catholics referred to homosexuals not to masturbation. Fletcher continued by stating that the moral argument against masturbation was that it was selfish, uncreative, unproductive and self regarding. Fletcher argued that these words could not be applied to AID.

The other objections stem from the claim that AID was adultery, a violation of the marriage and thus made the child illegitimate. Fletcher held that this was a rigid legalistic view of the marriage bond. Fletcher cited various Biblical references to indicate that the bond was not a legalistic monopoly. He felt that no adultery occurred in AID if the marriage was considered a personal rather than a legal relationship. Further the claim that AID was adultery was a legal claim not a moral objection. Even though Fletcher came to the conclusion that AID was morally good he cautioned that there were many objections, questions and doubts connected with the practice. He put them under three headings, social, psychological and legal.

He like many other writers named the responsibility assumed by the doctor as the most important consideration. He stated that this responsibility came from the fact that so much initiative and control lay with the physician. He addressed the issue of secrecy and concluded that secrecy weakened family ties and called for greater openess. Under this discussion of secrecy issues Fletcher contended that most doctors will refuse to inseminate the wife without the husband's consent and that to

use a husband's brother as a donor at the husband's request and without the wife's knowledge would be a violation of professional and marital confidence. It is important to note that Fletcher seemed to give tacit agreement to this version of the Old Testaments levirate law of marriage so long as all parties were made aware. Given Fletcher's stance on disclosure to the child this could be seen as the first approval for known donors. Fletcher also had comments on donors. Firstly, he called for the practice of using donated sperm locally be abondoned. This would eliminate unease for the donors who may wonder about the children they meet in the local community. He continued on to say that the donor's wife should be consulted by the donor and to agree to his donation. This would address the argument, that by donation the donor invaded his wife's rights. Fletcher dealt with the question of consanguinity by suggesting infrequent donations and a policy of wide geographical distribution of the sperm. His commentary seems to suggest that he did not see the innocent 'incest' as an ethical concern.

Fletcher's statement that AID for unmarried women may be disapproved on grounds such as the alleged inability of women to successfully parent a child without a husband, but that it is definitely not adultery, must rank as one of the most controversial statements in this decade. He continued by saying that if there was any objection (and obviously he was not convinced on this point) it must be to unmarried motherhood itself. The argument that AID weakens the kinship basis of families was seen as a materialistic or physiological view of family solidarity and as such had no ethical standpoint.

The claim that AID encouraged quackery was countered by an interesting view - "Experience throughout history of civilization provides ample proof that quackery prevails in

medicine and morals in direct proportion to our willingness to rely upon nature and that it declines in direct proportion to our willingness to rely upon the medical arts and their control over nature and its vagaries". Fletcher's comments on the legal issues contained the risks to the child by being declared illegitimate and a hope for the day when fatherhood will be based not on physiological nature but on moral choice and freedom.

Fletcher concluded that AID was morally lawful but that law psychology and social interest have extrinsic factors which makes the practice of AID unexpedient.

A symposium on Artificial Insemination was held in 1955 and the papers were reported in the Syracuse Law Review (1955) (6).

Various viewpoints were discussed -

1. The Medical Viewpoint
2. The Religious Viewpoints
   (a) Catholic
   (b) Protestant
   (c) Jewish
3. The Sociological and Anthropological Viewpoint
4. The Legal Viewpoint

A A. Weisman MD presented the medical viewpoint which was an acceptance of the practice. He described the results as excellent since all three members of the family (child, wife and husband) comprise a happy home.

By implication he suggested that the procedure should be kept a secret between the wife and husband. The only concern was in England about the repeated use of the same donor and the possbile intermarriage between half siblings. Accordig to Weisman this concern was not apparent in the United States.

A Reverend G. Ryan presented the Catholic View which said that the procedure was never morally justifiable because of the evil of masturbation and adultery. The practice was described as repugantly wicked since it violated the Laws of God. The statement of Pope Pius XII made on the subject at the Discourse to the Fourth International Congress of Catholic Doctors in Rome (1949) was relied on for this condemnation.

The Protestant View by Rev. C. Noble was much less dogmatic. As stated "there was as many opinion on artificial insemination among Protestant Christians as they are Protestants". The

writer however suggested the following as a guide to the Protestant attitude:-
Firstly, that no child was illegimate since all life comes from God and therefore was sacred. Secondly, that whatever enhanced the family was good and whatever detracted from the family was bad. Thirdly, that fulfillment of a person potential was good and lastly that each had the right to decide their own ethical decisions using past and present experience and the spirit of Christ as his/her guide.

From these four statements it was concluded that many Protestants would see artificial insemination as morally valid where there was male sterility, blood factors or similar conditions which made natural fertilization inadvisable or impossible.

The writer stated that the practice not only did no evil (such as violation of the sacredness of human life) it actually was a vehicle for good in that it furthered the expansion of Gods love in the widening family. The writer made strong recommendations for assessment of the couple's eligibility, for complete anonymity and for the careful choice of the donor. A suggestion was made that the couple's pastor should be a member of the consultation process. Reverend Noble finished his address with a caution and a call for a great deal more exploratory work. However, with this caution he concluded that it would be morally reprehensible to block this new hope for childless couples.

Rabbi Friedman then set out the Jewish view. Similar to the Protestant stance he stated that there was no one official Rabbinical pronoucement towards artificial insemination. Responses from three rabbinical scholars, Dr Solomon Freehof, Dr Alexander Guttman and Rabbi Ben Uziel were used as authorities on the question as to whether artificial insemination was

permitted by Jewish law. The areas of concern were (1) whether the child was a "Mamzer" (bastard) and (2) the possible violation of the laws of consanguinty.

The opinions as to whether AID was permitted or not varied, with Rabbi Freehof giving approval, Rabbie Uziel regarded it as a forbidden practice and Dr Guttman cautioning against a hasty "Hetter" (permit) without recommending a prohibition.

An anthropological and sociological viewpoint was presented by William Margin. He pointed out that even though artificial insemination did not "fit" in American culture mainly because of the connections made between sterility and lack of masculinity that the changes taking place in the family may mean that the practice may become more acceptable. He believed that there were four categories of conflicts. They were:-

(1) The moral questions concerning the "right" and/or "wrong" of the practice.
(2) The legal questions concerning paternity, rape, adultery and custody as well as inheritance, descent, and rights.
(3) The personal questions relating to cultural concepts of masculinity, sterility, impotence, infertility, childless marriages and adoption.
(4) The questions of changes in family functioning and social structure.

Margin discussed briefly two societies in which the reproductive function lay outside the family structure and that this has not lead to social disorganisation, moral degeneration or family instability. These societies were:-

(a) The Cluechua Indian Community of Vicos in the Peruvian Andes and
(b) The Banaro of New Guinea.

Ronald Goldfarb highlighted the unresolved legal questions relating to artificial insemination without making any statement as to the legality or otherwise of the practice.

At the close of this decade Paris Souval (7) reviewed the range of opinions regarding the moral validity of artificial insemination. His review included the Roman Catholic attitude, the Medical Scientific attitude and the Protestant attitude as put forward in Fletchers book.

1961 - 1970

This period saw the advent of psychiatric/psychological commentary on artificial insemination. Papers by Gestel (1) Sants (2), Rubin (3), Fish (4), Peyser (5), Watters & Sousa-Posa (6) all included psychiatric or psychological aspects of artificial insemination.

Gerstel (1) was categorically opposed to artificial insemination stating that "a decision to participate in artificial insemination in itself is indicative of an emotional disturbance". Gestel attacked the minimum medical and psychological precautions in place in the process. She called the procedure the "big lie". The author explored the psychologic effects of AID from a psychodynamic viewpoint and concluded that family relationships were pathologically affected and that rather than AID being "therapeutic" the process was fraught with dangers to the wife the husband and the child.

Rubin (3) dismissed Gerstel's report as "dealing with a highly selected population". He added that Gerstel's position was poorly documented. He stated that the two areas that worry physicians and patients were:-

1. The dangers of AID to the family and society.
2. The possibility of consanguinous marriages between donor and children.

Rubin documented the divided opinions among physicians lawmakers and theologicans and noted that even though there was common concerns expressed about the dangers of AID there was no consensus as to the most appropriate legal and social response.

In his conclusions Rubin traced the historical development of the incest taboo and Freuds explanation of incest in his 1905 paper. Rubin then concluded that the distaste and discomfort associated with artificial insemination using donor sperm "fits most closely with feelings elicted against incestous strivings". Rubin went further to suggest that the need for secrecy, which was so important to the doctor, again seemed to be associated with the unconscious feeling that the baby was the doctor's responsibility. Rubin stated that the continuing concern for all, mothers, doctors, lawyers and theologicans, was the danger of consanguinous marriages, in other words that possible incestous liasons may result from AID. Rubin concluded that the procedure will probably be used with continued concern even though it was being done by ethical doctors who were aware of the dangers and had instituted appropriate safeguards.

Peyser (5) (1965) presented 2 case reports in which major psychiatric disturbances occurred in the recipient couples. He concluded that there was a strong case for full psychiatric investigation of the couple before AID and close follow up studies after. He noted the lack of follow up studies and stated that the concern for secrecy surrounding the practice was a disincentive to the studies. It is interesting to note that Peyser suggested that the religious equation of AID with adultery may be expressing a deep psychological truth at least with some couples.

Fish (4) (1965) defined the moral problem of AID as "Is this act compatible with the sanctity of marriage"? In other words was

AID equivalent to adultery Fish tentatively concluded that AID was not adultery since there was no emotional involvement between the participating individuals. Fish stated that the psychological problems associated with AID may be the most difficult. He listed a set of conditions that the husband must resolve or accept before AID was undertaken. He believed that the husband must have adequately grieved the loss of his own fertility and that the couple must agree to absolute secrecy from family, friends and the child. Fish also outlined criteria for donor selection. Matching of the donor to the husband for racial and religious background as well as physical characteristics was undertaken. Donor should be free of infectious diseases, have a normal sperm count and be of high intelligence. Married men who have children may be used as donors if their wife agrees. This is one of the few references along with Fletcher in 1954 that included the wife of the donor as part of the process. Fish advocated either intercourse within 24 hours after insemination or sperm mixing because this made it difficult to prove any pregnancy was definitely the result of AID.

Watters & Souza-Posa (6) reviewed the legal, religious and psychiatric literature written on the subject. The authors cast doubts on Rubins conclusions because of his use of a highly suspect data gathering method although they do agree that in all probability some of the strongly held views have irrational basis. Watters and Souza-Posa saw couple selection as the key issue and suggested the services of a dynamically orientated psychiatrist be employed in each case. They saw the psychiatrist as taking a very central role in deciding whether or not the couple be allowed to proceed to AID. In summary, they state that they saw the procedure as ethical and that the psychiatrist should be available during and after the pregnancy. Finally, an in depth study of the long term results in a large number of families was recommended.

Levie (7) (1967) carried out a follow up study of 58 couples who had conceived on AID between 1951 - 1961. His conclusion was that in carefully selected couples AID increases joy in life and never harmed the marriage relationship. Further both spouses reported almost unanimously favourable results.

The positive view expressed by Levie was in stark contrast to that of Pollock (8) (1967) when it is stated that AID is "fraught with moral and legal problems". Pollock reminded the doctors of the heavy responsibility they incurred by advising the couple and choosing the donor. He also saw it as the doctors responsibility to satisfy himself that "the child will have a secure material background etc..." (Feversham Committee (8) 1960).

He outlined a list of criteria for donor selection similar to Fish and like Fish believed young hospital physicians with children or medical students were the best donors. Pollock added that in USA $20-25 per sample was the usual payment whèreas in Great Britain donation was often voluntary. Secrecy to Pollock was vital and advised the couple accordingly.

Professor Stallworthy (9) (1970) asked if a wife as part of her right to live was free to chose artificial insemination by donor. Further is the male as part of his right to live free to reject his male ego so that he may bring about greater fulfilment for his wife.

According to Stallworthy the right to live does not extend to artificial insemination by donor because of the practical ramifications.

Stallworthy's view was a global consideration and he was concerned that the population explosion would cause famine, poverty, resolution and war.

Berger's (10) (1970) article on the ethics of future medical practice raised the question regarding insemination of unmarried women but did not seek an answer. A suggestion was made that frozen sperm be kept until the donor had been dead for at least 20 years to avoid paternity suits.

Perhaps the most significant paper of this period was that by Sants (2) (1964) in which he explored "Genealogical bewilderment" in children with substitute parents. This term was applied to children who had no or uncertain knowledge of his parents. The resulting state of confusion and uncertainty undermined the child's security and affected his mental health. This paper did not directly address the practice of donor insemination however, the issue of "genealogical bewilderment" is applicable. By inference the practice of keeping the circumstances of the conception secret from the child was labelled as dangerous to the child. The danger is that the child sensing that facts are being withheld will conclude that these facts indicate a tainted heredity. He will fill the gaps with fantasies so that he may be more disturbed than by knowing the reality. This paper addressed issues such as fear of incest leading to the desire to identify the natural parents, ancestor worship and identification.

1971 - 1976

At the beginning of this period Weinstock (1) in his comprehensive paper "Artificial Insemination - The Problem and the Solution" reviewed the history of artificial insemination making particular reference to the legal cases and the legislation relevant to AID. This paper was significant in that the author outlined proposed legislation to cover AID. This legislation included protocols and consent forms for the recipient couple, the donor and his wife. The following ethical issues were addressed in the proposed legislation - that AID was defined as a non adulterous act and thus lawful in every respect. That the doctor would have the total power to select the donor whom he felt best matched the physical and mental characteristics of the husband and also to accept or reject the couple. This donor would be kept absolutely anonymous to the couple. The doctor would have the responsibility to ensure that the couple can give the child financial security. The proposed statute embodied a waiting time of six months from the first meeting with the doctor to the first insemination. This time was meant both to help the doctor fully assess the couple and to give them time to consider the matters of AID. This legislation thus addressed the issue of couple preparation and for the first time a realisation emerged that this preparation takes some considerable time. The consent forms were designed to protect the doctor from possible future law suits for (a) child support or (b) rape and also because the practice of AID was not universally accepted.

The statute called for the donor as well as his wife to sign consent forms regarding the donation. The donor couple would promise never to seek to learn the names of the recipient couple or to seek custody of the child. The proposed law would prohibit donations from men who were less than 28 years old and would limit the number of inseminations per donor to 15. In

addition a central registry was proposed which would contain records of all AID births. From the paper it is clear that donor records would be included. Finally, the legislation was proposed to be retroactive thus relieving the existing AID children of uncertainy and the illegitimate tag.

This statute comprehensively dealt with all parties ie. the recipient couple, the donor couple, the child, the doctor and society. This was one of the very few attempts in the literature to balance the needs of all parties.

Further legal comment was made by M. Revillard (2) in the International and Compartative Law Quarterly in which the author detailed the laws pertaining to AID in various countries. French Civil Code at this time ignored AID as did many other countries. Scandinavia (Denmark, Sweden and Norway) had had an advice on AID since 1948 but this had never been enacted. Switzerland had expressly forbidden AID as being incompatible with marriage and made provision for disavowment of the child. The author detailed his view of how the French Civil Code would deal with disputes in AID cases. He stated that the doctor was at risk of infringement of criminal law in areas such as indecent behaviour, adultery or contraint but not rape. Interestingly, the laws of affiliation ensured the AID child a legitimate status but the paper continued to describe such a child as adultine.

The psychiatric/psychological literature from this period continued the trend of suggesting careful selection preparation and evaluation of couples on AID programs. David & Avidan (3) strongly recommended the inclusion of a psychologist on the treatment team. These workers made provision for the use of the same donor for second pregnancies and thus kept adequate, although secret, records. This recognition of couples' need to use the same donor was also evident in Tekavcic (4) paper.

Tekavcic's use of the words "Obviously the second AID trial for a second child was performed with the semen of the same donor" ignored the fact that this facility indicated a major shift in medical thinking. The ethical issues of mixed sperm donations were not addressed and this procedure was considered to have "..... only a psychological significance".

Nijs & Rouffa (5) called for a careful assessment of the couple's psycho sexual relationship and suggested AID was contraindicated if the infertility was caused by impotence.

The authors suggested that AID was a mere technical intervention on a biological plane as it was not personal or relational. Thus from a psychological viewpoint the donor didn't exist. They were thus suggesting that the couple depersonalise the donor. It was for this reason that they viewed as inadvisable the use of a family donor eg. the husband's brother. They saw this as an over estimation of the blood relationship and that it placed the child in a complex situation.

Schroeder (6) in the American Journal of Psychiatry lamented the ambivalent pedestrian ways of thinking exhibited by the legal system in their treatment of AID.

Marcel Assael and Zvi Palti (7) stressed the need for a psychiatrist to evaluate the recipient couple. The authors detailed the pychiatric disturbances that could take place due to AID and called for more long term pychological follow up on the couple and the child.

Alison Bonythorn (8) one of the first social workers to enter the literature also called for follow up studies to identify problems such as acceptance of the child. On the issues of whether or not the child should be told the author was non

committal and preferred to say that it was the couple's choice although she did state that "Unlike adoption once the woman has become pregnant there is no need for any explanation to the outside world". A further indication of Bonythorn stance on secrecy can be gleaned from her comment that the couple are encouraged to have a normal sex life throughout the procedure because the husband may then be the father.

Her statement that the selection of donors is "a purely medical process ....." seems contradictory to her assertion that the donor had rights. The protection of these unspecified rights was gained by referring the pregnant woman to a doctor who was unaware of the AID. Bonythorn concluded by stating that the success of AID will depend on the acceptance by the father of a wider view of parenthood.

A paper by Chong & Taynor (9) (1975) outlined sixteen years experience of AID results and even though it did not address any ethical issues it contained a statement which may be indicative of later medical opinion regarding ethical considerations. This statement read "AID has been practised in this country for many years but its acceptance of use have increased in the last few decades. This increase can perhaps be explained by a decrease in the influence of legal, moral, ethical and theological considerations on the procedure and by the decreasing availability of children for adoption".

An editorial in the British Medical Journal (10) continued the theme in the above quote by saying that the difficulties associated with AID were mainly administrative. Concerns were expressed that students were being used when they were asked to be donors and that since most donors expected to be paid that a precedent was being set which might mean that blood donors would not be willing to donate freely.

The editorial concluded that to run a successful AID programme required "responsible assessment, excellent and expensive organisation and above all tact, confidentiality and absolute secrecy".

The paper by M. Frankel (11) was the first found which addressed some of the issues associated with the freezing and preservation of sperm. Frankel stated that in 1973 there were 16 sperm banks in USA - this included 3 major commercial banks. With a similar history to AID the commercial use of sperm banks was a fait accompli before the issues were sorted out. Frankel saw one of these issues as the lack of professional guidelines or legal codes for the selection of couples having access to the sperm bank or for the selection of donors. More important to Frankel was the issue of informed consent. The American Public Health Authority had stated "Biologic potency and genetic adequacy of sperm which has been frozen and stored over a protracted time and then thawed remains to be established". According to the author there was no evidence that this warning was being communicated to prospective users by the sperm banks.

The question of informed consent and how adequate was the information extended to the use of sperm banks for fertility insurance by vasectomised men. Frankel felt that the patients best interests were not being protected when there was no guarantee that the semen would be usable at a later date. Also there was a concern that the promise of fertility insurance may persuade immature or poorly motivated males to undergo vasectomy. Further the author saw a conflict of interest for the doctors who were involved in research and at the same time counselled patients on the therapeutic or contraceptive benefits of banking sperm. Another major concern expressed was the treatment of semen as a commodity. The question raised was that if semen can be bought and sold what impact would this have on

social values as well as prospective donors of blood, eyes and kidneys.

Would remuneration be viewed as a sign that donors need no longer be concerned with the consequences of their donation. This remuneration may be used by drug users to maintain their habits. Frankel was worried about the possible chromosomal damage of long term drug use.

The future possibility of influencing the genetic quality of the species now that sperm can be stored influenced the author to call for other sectors of society to be included in the decision making process.

In contrast to previous periods this six years saw papers specifically written on the ethical issues associated with AID. One such writer was Professor G.R. Dunstan. He made significant contributions in 1973 (12) 1975 (13 (1976 (14).

In his contribution to the 1972 Ciba Foundation Symposium he stated that AID as practiced obliged conspiracy of all concerned to deceive the child and society as to the child's true genetic identity. This violation of truth undermined credibility and was a serious ethical matter. Dunstan further argued that the concept of legitimacy was "socially useless" and should be abolished and replaced by a concept of social filiation. Further he called for a genetic as well as a social registry to be instituted which would be open to those who could prove a compelling interest. This system would obviously interdict mixed sperm insemination.

Dunstan felt that the claim to medical intervention of a childless woman was not an absolute claim if it was met at the expense of harming in unacceptable ways other societal interests, the principle of distribution justice would require that the woman be helped in some other manner. As other commentators had noted other interests included those of the AID child. Dunstan commented on the uncertainty surrounding the issue of disclosure to the child about the method of conception and called for studies to determine the beneficial consequence or otherwise of disclosure. Further he stated that the continuance of AID should be contingent on the outcome of these studies. Another area of moral concern was the integrity of the marriage. The author detailed the two ethical viewpoints. The view that says that the nexus between marriage and procreation is exclusive. This view had AID as 'adulterous'. This as Dunstan pointed out was the traditional viewpoint held by the

Jewish Orthodox and magisterial Christian churches. Further this nexus had been emphasised by the Graeco Roman tradition of the law and philosphy. On the other hand people who regard the donor sperm as a mere fertilizing agent and who believe the nexus ends with the physical union of the husband and wife would see the use of third party semen as not violating the marriage. Dunstan questioned whether this rational judgement does justice to the socio-psycho-physical reality of the problem and called for close discussion.

Dunstan was also concerned about 'donor' issues. He noted the ignorance and uncertainty about donor motives, and the short and long term effects on the donor as the genetic father of the child. According to Dunstan, the moral difficulty was associated with the requirement that a man should take responsibility for his offspring. The donor was not freed of this obligation by the social father and mother, being responsible for the child. The donors action was therefore anti human by isolating biological from human potential. Dunstan pointed out that to see the donation as "a loving act" does not answer all the questions for "love" cannot oblige a person to act in a less than human manner.

The author also questioned the payment of donors and quoted the concern first demonstrated by Titmus (1971 The Gift and Relationship (15). He judged AID for an umarried woman and performing AID on a wife without the informed consent of her husband as unethical. Further he believed the donor's wife must consent to her husband's donation because a husband may not morally violate "The mutual and exclusive exchange of procreative powers". He cautioned that the donor's wife consent does not make the act of donation right unless it can be established that the act in itself is right. He concluded by stating that there are two inheritances that man must

preserve ie. Genetic and cultural inheritance. Cultural inheritance included the rational, moral, emotional and aesthetic capacities to which the terms "humane" and "humanity" apply. Dunstan called for careful consideration of the risks involved in the manipulative powers of science.

Another contributor to the CIBA Symposium was Anne McClaren (16). This author briefly noted the positive eugenics of AID but concluded there was little or no concern that procedure would be used in this manner. She also was unimpressed with the concerns expressed by the fear of donor children marrying.

Massimo Piattelli-Palmarini (17) found the concept of a "potential human being" was questionable and this relieved the doctor of any claim that he could injure potential humans.

This author believed that the person and his "feelings in the world" depends on the history of his beginnings, the awareness of the bonds which link him to nature and his fellow men as well as having a healthy body and a well balanced mind.

He continued by questioning sperm and egg banks on the grounds that excessive randomisation in the gene pools would give rise to a genotype with no history. His next concern was that bourgeois society did not value genetic influence and accounted for all differences by culture. The denying of the crucial influence of genetics could according to the author adversely affect human dignity.

This loss of dignity was associated with a possible loss of identity when the AID child became merely a means to gratify a frustrated mother.

Prattelli-Palmarine was concerned that biological manipulations could destroy the balance between nature and culture.

Charles Fried (18) in his contribution to the CIBA Foundation Symposium stated that the development of fertility treatments was a valid objective because he placed it as a claim to basic fulfilment much like the claims to education, housing, health care etc. He dismissed the counter argument that infertility tratments should be discouraged on the grounds of over population and homelessness.

This author was concerned about the loss of randomness and uniqueness of the person conceived. This technique of AID would negatively impact on concepts of self/personhood.

He felt that there must be a physical and emotional continuity between parents and child otherwise there is a subsequent loss of security and individuality. Fried concluded that AID had a place but only after all assistance has been given firstly to natural or as he stated "canonical" pregnancies and secondly to those using the husbands and wife's gametes.

The final contribution was from Olive Stone (19) who outlined English Law in relation to AID. She also briefly commented on the confused laws in the USA. Two interesting facts emerged. Firstly, after 1969 any woman over 16 years could give valid consent to AID and secondly, for life insurance purposes all known facts and a list of unknown facts needed to be given before an AID child could be insured. The author suggested the physician would presumably reveal to the insurance company the facts he knew at the request of the parents.

Professor Louros in 1972 (20) wrote an article which raised unanswered questions about AID. He noted that the view that AID was acceptable was gaining wide acceptance. Louros was worried by the possibility of the wife seeing the donor as a lover and that the outcome would be a weakening of moral structure of the

marriage. He was further concerned that the characteristics of a child so conceived would be such that paternal love would not develop. Sperm banks were described as a "token of contempt for man". Louros saw AID as unethical because of the effects on the child and the marriage and he was convinced that experience would force legal sanctions against the procedure. He called for worldwide settlement of the legal questions and for the speciality of gynaecology to prevent any legal recognition of AID.

In 1972 the Journal of American Medical Association (21) issued an editorial comment on Paul Ramsey's article. Paul Ramsey was concerned that AID was being accepted because of its immediate good result of relieving childlessness but this meant there was a subtle conditioning to accept the next step ie. artificial fertilization. As Ramsay said "the thin edge of the wedge or the camel's nose under the tent".

Two questions are raised. Firstly, whether there is a right to satisfy legitimate desires and needs by any needs and secondly what are we doing to the act by which human procreation takes place. According to Ramsey AID dehumanised the act of procreation to one of reproduction.

Other ethical papers included that by H. Horne in 1975 (22). Horne argued for AID to be used only in cases of Azoospermia and not for Oligospermia. He also called for the judgement of rightness or wrongness of AID to be based solely on the long term social and psychological effects on couple and the child. This obviously would need long range studies of effects such as telling the child. Horne felt it was unwise and unnecessary to tell the child because of the psychological effects on the child and the husband.

Horne was concerned about the use of unjustified AID which may impact negatively on the relationships and stated that the primary moral concern was the future of the potential child.

An article in the Journal of Medical Ethics (23) reviewed the conclusions of a working party set up by the British Association for the Advancement of Science. The working party was critiscised for their views about the lack of need to screen donors, the lack of need to allow recipient women to match donor characteristics with their husbands and for not addressing issues such as legal ownership of semen and financial inducement to donors. The article commended the working party for their suggestion of a registration scheme for AID practitioners not so much to prevent abuse (as the working party suggested) but to allay public fears and to speed the amendement of the law regarding birth registration, inheritance and the status of the child.

1977 - 1980

This period was significant for the first publication of recipient couples' experience of AID. Blizzard's (1) personal account was strident in its call for better couple preparation and the recognition by the medical profession of the psychosocial aspects of AID. Harvey & Harvey (2) gave a more detached account of their response to the program. This article clearly identified but gave no answers to the issues and dilemas facing every couple contemplating AID. It is important to note that the names used by these authors were pseudonyms.

The Dictionary of Medical Ethics (3) in 1977 outlined the ethical questions faced by the couple, the donor and the AID practitioner and concluded that a code of ethical practice was necessary. The Dictionary stated that the secrecy surrounding the procedure had hindered good practice in that there was no common protocol for selection of donors or patients and no recording or publishing of data. It also concluded that there was no convincing argument for denying the child the knowledge of their true identity.

The area of donor psychology was highlighted as neglected and in need of study. The Dictionary stated that the practitioner has responsibilities to the couple, the child and the donor. The responsibilities to the donor were listed as consideration, non exploitation and non imposition.

Two articles appeared in the South Medical Journal (4) (5). The first stated that the practice even though illegal in South Africa was firmly established in many other countries where the moral and legal objections had subsided. The second article suggested a code of practice. This article declared the

practice legal in South Africa. The code of practice called for careful medical selection of donors, complete anonymity between recipient and donor and a limit of five successful inseminations per donor. The doctor is charged with complete confidentiality regarding the circumstances of the childs conception.

Donors were entitled to reimbursement of expenses and were to be informed that the sperm is intended for use in AID.

The doctors were charged with assessing the couples social and psychological state before performing AID. The practice could only be performed on married women after the couple and the practitioner had fully discussed the implications of the procedure. An unusual condition was that once the assessment was complete the "treatment should start as soon as possible".

Simple matching of donor/recipient was suggested although it was not clear if this meant matching the donor to the husband. Information regarding an untoward outcome of a pregnancy was to be passed onto the donor.

Two articles (6) & (7) concerning male infertility and Jewish law appeared in 1977 and 1978. Although most rabbinic opinion strictly prohibited AID some commentators found AID permissible if no other method existed for the wife to become pregnant. This divided opinion was apparent in questions related to:-

(a) Whether the recipient was guilty of adultery.
(b) Whether the child was the donor's son in respect of inheritance, incest, custody levirate marriage etc.
(c) Whether the child was legitimate.
(d) Whether masturbation for sperm procurement was immoral - A Rabbi Waldenberg stated that if possible the physician should perform the masturbation in AIH. Whether this practice was extended to AID was not clear.

Stone's (8) paper dealt with the practicalities of AID however, he did address the issue of "husband involvement" by encouraging the husband to be present at the first procedure. His main ethical concern was the possibility of intermarriage related to AID program. He cited the secrecy which surrounded the procedure as the cause of consanguinous marriage. He suggested that there be a limit on the number of pregnancies per donor and the protocol indicated that sperm mixing was not practiced.

Brandon (9) in her paper co authored with Warner outlined the legal position of the child. In 1977 in England it was still strictly an offence to register an AID child as that of the husband. She also stated the Established Church View that AID was adultery. She then reviewed the arguments against acknowledging the child's origins using the adoption experience as a comparison to AID. Her conclusions were that the arguments against were invalid and the the child should be told. She acknowledged that the difficulties of telling a child about its biological origin may be the lack of a "script". In her later paper (10) she confirmed her belief that the child should be told and called for information about the donor eg. a description of his interests, work, appearance etc. to be made available to the parents and child. Brandon was concerned about possible consequences for the donors later in their lives and suggested the donor be provided counselling. In both her papers she stated research was urgently required as co-operation between the disciplines associated with AID to improve the psycho social assessment of patients and their families. Bonython (11) another social worker was non committal on the issue of "Telling the child". When she stated that there were different schools of thought and that anyhow there would be no donor details available. The task of assessment of the couple was seen as difficult and the author raised the question of whether a program had the right to refuse. This question of

refusal was also considered by Cosgrove (12) with regard to AID for lesbian women. No decision was reached except to state that the British Medical Association considered that a doctor has a duty to treat each person on the basis of individual need. It was also acknowledged that the doctor's primary responsibility was to the unborn child. This apparent contradiction was not clarified.

The right of doctors refusal was also questioned by Templeton (13) and he called for public debate on the issue. He offerred broad guidelines before a doctor proceeded with AID. The guidelines included no severe illness in the couple who must be fully informed have a stable mature relationship and have any moral or religious questioned resolved. Templeton also identified the area of donor selection and preparation as in need of discussion. He called for better attempts to examine donor motivation as well as opportunities being given to the donor's wife to discuss her doubts before the husband is used as a donor.

On the question of legitimacy for the child, the author suggested this legal concept be abolished and replaced by the idea of the "Accepted Child". He saw a need for society to resolve issues of central registries and secrecy otherwise couples and practitioners would continue to have difficulties as the need for AID increased.

Smith (14) was concerned with the threat of exploitation of the donor. He saw medical students (who were a source of sperm donors) as a captive population who were vulnerable to abuse. Smith's paper was in contrast to that written by Annas (15) who felt that protocols were based on protecting the sperm donor at the expense of the recipient couple and child. Annas contended that the term "donor" gave the impression that the sperm vendor was doing some service for the good of humanity and thus

deserved some special protection rather than performing a paid service. He further stated that the selection of medical students as donors was eugenics and questioned if this was an attempt by doctors to reproduce themselves. Thus selection in this manner seemed to be in the best interests of the physicians rather than the child and cannot be justified. Annas continued to question whether physicians were adequately trained in genetics and continued that they were not and that this raised serious concerns. His recommendations were based on his view that the current practice was based on exaggerated fears of legal pitfalls and thus was dangerous to the children. The recommendations were:-

1. Remove AID from the hands of medical personnel and add routine genetic consultation.

2. Develop uniform national standards for AID and include permanent record keeping, limit the number of pregnancies per donor, ban sperm mixing, on going research on the psychological development of the children conceived by AID.

Annas views were based on the perceived imbalance in the process ie. the donor had a choice; the child had none.

Soane (16) commenting on B. Harings moral theory noted that Haring condemned AID because of the loss of the unity between love and procreation.

Karp's (17) historical paper on Eutelegenesis noted that positive eugenics had been advocated by Plato, Galton and in the 20th Century by Brewer and Muller in 1935. Karp concluded that in 1980 eutelegenesis was out of fashion but the underlying motivation ie. Mullens thesis still had considerable appeal. An interesting addendum to this paper noted that as the essay

went to press the San Diego based H.J. Muller Repository for Geminal Choice - a sperm bank for Nobel Prize Winners opened for business.

Walters (18) in his paper noted that for a busy physician the ethical arguments opposed to AID seem vague, irrelevant and out of touch. This view seemed confirmed by a series of 4 papers (19) (20) (21) (22) in which very little ethical discussion took place. Readings of these papers indicated concerns about medico legal aspects and the identified inadequacy of donor and couple work up, as well as the follow up of the AID families. Berger's (23) view was that a postponement of treatment for 3-4 months may be beneficial in allowing couples to adjust and he gave tentative support for some openeness between parents and the child.

Walters cautioned the clinican to consider the effects of AID on the couple, the child, the extended family and on society. He suggested that physicians should seek the help of other disciplines including moral philosphers, psychologists, sociologists etc. in reaching decisions about the complex issues surrounding AID. He particularly commended the setting up of ethic committees to assist medical staff with contentious issues. The author briefly reviewed the main ethical questions and the traditional church views and such prominent writers as Dunstan and Fletcher. His main contributions was a call for a national register of donors and the observation that payment of donors should be avoided. He noted that the adverse effects of human breeding are highlighted whereas we accept the positive aspects of animal breeding programs.

Walters concluded that no firm conclusions could be reached as to the moral validity of AID.

1981 - 1985

This period produced many papers dealing with the various aspects of AID. Interestingly, five articles were obtained which considered artificial insemination of single or lesbian women. Hanscombe (1) concluded that lesbians are "pathologised" by the medical profession and thus AID is not generally provided. It stated that "using an argument based on an individual's sexual practice to exclude adult people from parenthood is untenable, uncivilised and immoral".

In the Hastings Centre Report (1983) (2) a series of letters appeared commenting on a situation in which a single woman achieved an AID baby and subsequently claimed government welfare support. Comments included "Parents primary function is to provide economic support", "a baby interest is a desire for a father" and "an AID baby born to a single woman is left to imagine an anonymous donor".

It was stated that "welfare is intended to provide support for those whose income through no fault of their own falls below a set level" Strong & Schinfeld (3) (1984).

The available data reviewed concluded that it was ethically permissible that to carry out AID for a single woman in specially selected cases but that the physician was not obliged to do so. Fletcher (4) (1985) agreed with this conclusion and added that the physician had no duty to refer the single woman/lesbian who was seeking AID.

Strong & Schinfeld also had developed a series of guidelines for dealing with an AID request. They were:-

The health and financial situation of the recipient should be investigated fully. AID would be withheld if it appeared that state financial support would be required. The potential recipient as well as significant others should show evidence of having thought through the issues and to be counselled re the importance of child - adult interaction. The recipient would need a good support system. The donors permission would be sought to use his sperm with a single woman.

McGuire & Alexander (5) (1985) mounted a powerful statistical argument to show that the children in single parent families had normal gender identity, behaviour and partner preference. Thus the information did not support denying AID to single women. They added that medical judgement and psychological testing should be used with candidates who seem incapable of supporting a child.

An influential writer in these years was R. Snowden. He co-authored three books with G. Mitchell and E. Snowden dealing with issues surrounding Reproductive Technologies (6), (7), (8). These publications carefully detailed the arguments for and against secrecy as well as the cost and benefits of this secrecy. They concluded that the social implications of secrecy were too great and encouraged more skilled counselling for couples and donors. The belief that it would be logical to restrict AID to married couples was also stated.

Another clearly laid out discussion on the arguments for and against disclosure was produced by Russell Scott (9), although this author came to no definite conclusion regarding the issue of secrecy.

Three important workshops/conferences took place on this period.

(a) A Child is not the Cure for Infertility: Workshop on Infertility (10) 1982.

(b) Ethical implications in the use of donor sperm, eggs and embryos in the treatment of human infertility. (11) 1983.

(c) Adoption and AID - Access to Information. (12) 1983.

The conclusions of the first of those workshops included:-

(a) A recognition of the inherent conflict between the rights of the child for openess and honesty and the rights of the adults for secrecy and confidentality.

(b) A lack of a "script" in how to tell the child.

(c) Potential problems for children in establishment of "Who am I?" and "Who is my "family"?

(d) An urgent need for community involvement in the debate on issues and questions such as whether the community should support/condone AID, who should make decisions, whether sperm should be sold, secrecy, child's need to access information, funding questions.

In his summary of the conference "Ethical Implications etc" Dr Allen noted that patients are rarely interested in ethical considerations. He commented that donor arrangements such as payment, ownership of sperm etc. were major ethical concerns for some speakers. He questioned the relevance of the Christian

ethic to "today's almost unbelievable scientific events". He further questioned how ethical considerations could focus on practical outcomes when the discussion centred on whether to allow real life experiences to take place. He concluded by stating the unanimous support for greater consideration of the rights of all the parties involved.

The third conference continued the argument about the childs right to access to information regarding the donor. The discussion continued along the previously established lines - ie. the rights of the child versus the rights of the donor and parents. The arguments included the concern that until the legal situation was clarified the donor would be vulnerable. It is important to note that the third conference was held a month before the amendment of the Family Law Act which removed most but not all the problems of illegitimacy. The amendment protected the donor from maintenance claims. This amendment did not cover defacto couples.

A paper by Jansen (13) was unusual in that it tackled the issue of ownership of donated gametes and why the apparent contradiction existed that people do not care about millions of sperm that are lost but the fate of one frozen straw of sperm engendered so much emotion. Jansen concluded that this dichotomy was a result of gamete donation being a donation of genetic information which was usuable. This usuability made the donated gametes special. The author pointed out that the sanctity of information transfer was a new area for legal resolution. He suggested that many of the issues surrounding gamete donation would be clarified if it was recognised that control over genetic expression in the child was still important after donation.

Grobstein & Flower (14) in their paper concerned with ethical issues in IVF briefly touched on the involvement of third parties. This involvement raised questions as to the meaning of parentage, family values and the sanctity of the natural order of procreation. The authors statedthat genetic lineage had a high psychological, medical and legal value, however, exceptions such as adoption were not regarded as immoral. Thus the moral primacy of genetic lineage was never considered absolute. On the question of sperm donation being a violation of marriage, the authors pointed out that AID did not violate the exclusive sexual relationship and thus the argument which said that AID amounted to adultery must assume that the purpose of sexual exclusiveness was the procreation of children of joint genetic heritage. The authors rejected this argument and stated that the use of donor sperm was ethically justified under appropriate conditions.

An article from the Hasting Centre by Feldman (15) said that AID in Japan was exceedingly rare because it was incompatible with the culture. This culture was concerned about blood lines and having a known genealogy. This concern underpinned a preference to adopt a grown male, often their own son in law. This way the adopting parents could be confident of an "adequate pedigree". At the time there was one unit in Japan carrying out 95% of all AID (250 births/year). Donor pregnancies were limited to 15 per donor, there were few health checks on the donor, the donor was not guaranteed anonymity and only married couples were treated.

In contrast to other periods a plethora of surveys associated with AID were undertaken from 1981 to 1985. Donor Attitudenal and Characteristic surveys were carried out by Rowland 1983 (16), Kovacs (17) et al (1983), Nicholas (18) et al (1983) and Handelsman (19) et al (1985). It is of interest that these four papers were produced by Australian workers. All four papers

concluded that donors would not object to non identifying information being released to the recipient couples, that most donated for altrustic not financial reasons as was generally believed, that most would like more information regarding outcomes of their donations and were generally favourable to insemination of single women.

Handlesman noted that in most medical literature the ethical and moral issues of AID were not discussed. This lack was particularly evident in regards to the donor and his role - ethical and moral issues were ignored. He attempted to redress this lack by stating that rejected donors may be at risk psychologically and the "vending status" of the donor if payment took place. He seemed to be suggesting that counselling of the donors may be appropriate. Rowland called counselling "essential" for the donors and stressed that records should not be destroyed since people may change their opinion on issues such as anonymity. Rowland also questioned the approval by sections of the medical profession of the donor feeling no connection to the AID child.

A paper by Leiblum & Barbrack (20) (1983) surveyed attitudes and knowledge of medical students and infertile couples. The survey found that not a single attitudinal statement elicted a unanimous agreement amongst the students. The authors concluded that it was not surprising that there was conflict regarding AID in the general public if the physicians disagree regarding the merits or otherwise of the procedure. Two results are worth noting. Firstly, amongst the medical students, 66% said AID recipients should be permitted to select the donor and to the question "Is AID like committing adultery"?, 87% of male medical students agreed whereas only 13% of female students agreed.

Patient surveys (21) (22) (23) (24) (25) (26) (27) (28) overwhelmingly reported positive results of AID. Rosenkvist (21) (1981) in his extensive paper gave another view on the vexed question of "assessment and selection" of recipients. He suggested that instead of using rigid socio-psychological/psychiatric selection criteria, decisions on AID should be made the integrated responsibility of the clinic and the couple. Leeton & Blackwell (27) felt that selection could be appropriately made on basic chemical acumen.

Papers (21) (22) (26) (27) all called for the expanded use of counsellors/psychologists in the couples preparation. Generally it was concluded that patients planned not to tell the child but (23) and (27) noted that this may change as AID became more socially acceptable. The apparent time required for couples to adjust to both male infertility and the use of AID was commented on by Glezerman (22) and Ledward et al (23). Jones (28) felt that the patients views and opinions were being disregarded in the social debate about AID and as an example quoted that the vast majority of patients viewed a significant difference between an AID and an adopted child. He was concerned about applying adoption laws/ideas to the AID situation.

Three major surveys of community attitudes (29) (30) (31) indicated a general shift to a more positive stance about AID, however, a vast diversity of opinions was evident. The question of disclosure to the child met with variable responses but it seemed that approximately 50% of respondents approved of telling the child. Opinion was also divided on the provision of AID to defacto couples whilst there was a significant minority who approved of single/lesbian woman being treated. The idea of a National Registry of donors met with guarded approval.

The legal implications of AID were outlined by Palm (32). Issues such as informed consent, the physicians liability, fraud, the legal status of the child and parental rights were discussed. This article as well as that by Wright & Shaw (33) noted the lack of care generally exercised in the selection of donors. Wright & Shaw called for special attention to donors genealogical history especially for the determination of recessive genes. They also suggested that a heterozygote test should be performed on the donor.

Levine (34) in her work reviewed the medical, couple, legal and religious perspectives. She presented hypothetical legal cases to expand on issues inherent in AID. She concluded the following:-

(a) The prohibition of AID to single women was unconstitutional and thus women have the right to make such reproductive decisions.

(b) That the requirement of a husbands written consent for AID for his wife was unconstitutional and violated the womans rights.

(c) That an AID conceived child should have access to their records directly or through a judge who would have "clearinghouse" functions.

Brahams (35) in the Lancet reviewed some tentative suggestions from the Law Society. The review disagreed regarding the establishment of a compulsory central register and was not impressed by the expressed fears of incest. The author noted that before 1908 incest although considered morally reprehensible was not even as a common law crime. Brahams did agree with changes to the law regarding the status of the child provided there was written consent by the husband.

A detailed paper by Somerville (36) discussed issues such as 'the right to reproduce' especially for those people considered 'deviant' such as who were homosexual, transexual, mentally ill, mentally retarded etc. Somerville noted that the principle "what is in the best interests of the child" is applied in custody cases and asked if this should also be applied to govern access to birth/reproduction technology. She questioned how the balance would be struck between a claim by a person to be assisted and a belief that it was not in the best interest of a child to have that person as a parent. She suggested that the test was meaningless or contrary to public policy and the "best interest" test is only applicable to children already alive. Her conclusions were that we needed to be very careful about what we are doing and our motivations when we seek to deny or regulate reproduction claims from people we label as "deviant".

Two statutes from this period are noteworthy. Firstly, the New South Wales Artificial Conception Act of 1984 (37) which gave the husband legal status as regards the child and the Swedish Law 1985 (38). The Swedish Law made it mandatory for children to be informed for the identifying information regarding the donor to be kept for 70 years and to be available to the child at 18 years old. Single women were excluded from AID treatment. The children acquired legal status corresponding to that of a biological or adopted child.

The Warnock Committee set up in 1984 (39) (40) determined that whatever the moral desirability or otherwise of AID, it was better to allow it to continue subject to close monitoring and licensing. The Committee recommended a series of regulations which included:-

(a) Legitimacy for the child.
(b) The husband to be the presumed father.
(c) A limit of 10 children/donor.
(d) Counselling to be an integral part of the procedure and to be available to couples and donor at any stage.
(e) A gradual move towards only reimbursement of expenses to the donor.
(f) That only anonymous donations be recommended.
(g) That proper recording procedures be instituted.

In contrast the Waller Committee (41) recommended that a registry of donors be established and that comprehensive records/information be kept. It also concluded that "whether or not a person purses their origins, it should be possible for everyone to discover them .....". Thus the child should have access to some information about their origins. The Waller Committee shied away from deciding what information should be available. The Committee condemned any attempt by the medical profession to deliberately obsecure biological fatherhood such as sperm mixing.

The need for guidelines was addressed by the American Fertility Society with its ad hoc Committee Report on Artificial Insemination (42) 1981 and the Report from the Council for Science and Society (43). The Fertility Society recommendations were much more restrictive as far as secrecy. The Council for Science and Society recommended the child be told whereas the Fertility Society recommended that recipients be told that there was no benefit and considerable risk in informing relatives, friends and offspring. The Fertility Society defined management guidelines for donor couples and semen freezing. Both reports called for adequate counselling services for the recipients.

Psychological/Psychosocial issues continued to be debated by

doctors, psychologists, psychiatrists and social workers. Daniels et al (44, 45) in 1981 and 1982 called for a psycho social/team approach to assessment of couples. Daniels was aware that the need for AID emerges from male factors but the request for AID comes from a marriage and from a psycho social point of view the marriage is the focus. He noted the agreement in the literature that couples do not have an automatic right to AID and thus the assessment must acknowledge that all the parties have rights.

Daniels was concerned by the prevailing idea that the physicians should unquestioningly accept their role as techno servants to the community. In other words they did not have the right to say No to AID requests. Daniels felt that the possible effects of this would be socially and psychologically disastrous. He outlined the areas of assessment as duration and stability of the marriage, personal characteristics, social function and understanding of and comittment to AID.

Whereas it was accepted by most commentators that the decisions about ethical issues were the couple's responsibility (46) (47) (48) (49) Berger (47) in 1982 stated that the onus rested with the professionals to make the first move by being more active in encouraging the legal system to clarify the AID issues. He also suggested the focus of research move from the psychological aspects of AID to the psychological aspect of the secrecy that surrounded it. He believed that this would provide a new focus and raise questions not asked before.

Berger (47), Davis & Brown (48) in contrast to Waltzer (49) Corson et al (50) and Beck (51) were strong advocates of openess in AID. Davis said that donor medical, family and genetic history should be available to the child upon its maturity. Waltzer however was adamant that the couple should not and have no need to tell the child its method of conception. In fact he added "they should forget about it themselves".

He questioned why the discriminatory requirement of psychological/psychiatric evaluation should be placed on infertile couples when there is no societal controls on fertile individuals or couples.

Waltzer did raise many unasked questions but offered no answers. He concluded that "the whole gamut of human feelings is present in varying degress, in all the characters involved in the procedure of artifical inseminations". Beck disagreed with disclosure on the grounds that the husband unless azoospermic may still be the biological father. Corson et al strongly disagreed with an identifying information being given to the child because confidentiality was the only way of ensuring adequate numbers of donors and preserving the parents' constitutionally protected rights. Beck also agreed with this point of view to privacy. The authors saw the arguments for telling the child as far less compelling than the above reasons.

This conflict between the need for donor anonymity and need for adequate medical legal records especially since there was a growing tendancy of adopted children to seek biological parents was discussed by Hulka (52), who concluded there was a need for minimum guidelines on selection and management of donors. The controversy of anonymity as well as "payment" was discussed in relation to the medical schools in Melbourne by Worsnop (53) et al. Destruction of records was a general practice with some programmes viewing the attendant problems (eg. not possible for children to trace biological fathers, not possible to obtain semen from the same donor when recipients wish to have another child) as of minor importance. Concern was expressed re "innocent incest" so there was a maximum number of children/donor (6-8 children). Worries were also expressed about the donors being young and unmarried because these men were likely to be less apable of assessing how they may feel in

the future. The possible problems if the donor married a woman who objected to them being a donor was also discussed.

Allen et al (54) outlined the AID service at Groote Schurer Hospital and among the ethical aspects noted the one sided bilogical relationship within an AID family. The authors believed the parents needed careful adequate counselling on this important aspect.

Thompson & Boyle (55) offered "comfort" to professionals in the field when they stated that "professional concern about the ethics of AID should have been removed by the Report of the Panel on Human Artifical Insemination appointed by the BMA under the chairmanship of Sir John Peel (1973).

An overview of Artificial Insemination was produced by Olshansky and Sammons (56) in 1985. This article is important in that it is the first nursing paper found in this survey.

1986 - 1990

In this period, papers appeared dealing specifically with screening of donors. It could be postulated that the concern about the Human Immunodeficiency Virus (HIV) gave rise to these papers - It is important to note that even though the HIV was first identified in 1981 and the retrovirus known as T-cell leukaemia virus type lll was identified as the probable agent in 1984, only one paper in this survey prior to 1986 mentioned screening for AIDS virus.

Mascola and Guinan (1) in 1986 outlined an extensive protocol for screening to reduce the transmission of sexually transmitted diseases. They called it "prudent" to retest donors for HTLV-lll/LAV three to six months after donation and described the use of fresh semen as "clearly hazardous and should be discouraged". Greenblatt et al (2) also outlined an extensive testing regime and included the recommendations that semen mixing be prohibited and that the recipient couples be tested for the same infections. The authors stated that the use of frozen sperm needed close consideration and finally that the use of volunteer donors rather than paid donors reduced the risk of transmission of disease.

Hummel & Talbert (3) in 1989 called the use of fresh sperm "potentially hazardous" and suggested its use be discouraged. These authors stated that uniform rigorous genetic and microbiologic screening procedures needed to be instituted.

Other writers to highlight the lack of adequate donor screening were Ryan (4) Sokoloff (5) Andrews (6). These writers saw donor screening as protecting the best interests of the child. Ryan's quotation from Arthur Caplan was appropriate. "Caveat emptor is not enough of an ethic where making babies is concerned".

Sokoloff called for adequate record keeping and a dismantling of the secrecy around the use of donor sperm. He stated categorically that the child should be told and suggested "the script" needed to be associated with sexuality education.

He suggested legislation so that the legal rights of the child would be protected if a divorce occurred or a parent died. Andrews noted that under California law the donors legal rights to the child are not severed unless the sperm is supplied to a doctor. Thus in the situation of a known donor and self insemination, the donor remained the legal father.

Rosner (7) et al reviewed various committee findings. These included:-

1. The Warnock Committee
2. The American Medical Association Judicial Council.
3. The Ethic Committee of the American College of Obstetricians and Gynaecologists.
4. Ethic Committee Report of the American Fertility Society.

The American Fertility Society in both 1986 (8) and 1990 (9) issued supplements on the ethical considerations of the various reproductive technologies. Both stated that the main concern about the use of donor sperm was the introduction of third party gametes into the marriage dyad. The concern about consanguinity was addressed by recommending a maximum of 10 children per donor. In addition there was concern about the psychological effects on the child and the family especially as regards the perceived need for secrecy. Both found the use of AID ethically acceptable but both had the following footnote:-

There needs to be a better base of data to conclude that AID is ethically acceptable. The conclusion is too assertive and unnuanced. In light of the evidence available the conclusion might more accurately read "the Committee find AID not clearly and certainly unethical".

In 1986 the Committee said that more emphasis needed to be placed on the psychological impact of AID and recommended that counselling before and after AID be encouraged not merely offered. Surprisingly, this recommendation did not appear in the 1990 considerations and furthermore counselling per se was not mentioned.

The 1986 Committee saw the risk of fresh sperm as "very slight" and this was translated into the guidelines. However, the 1990 Committee also saw the risk of fresh sperm as "very slight" although it did state the position of the American Fertility Society that frozen sperm should be used (see guidelines).

Both committees called for permanent records which included both identifiable and non identifiable information. They both saw the release of identifying material only in "extreme situations". These considerations were translated into Guidelines for Reproductive Units.

The Guidelines for the use of Semen Donor Insemination were issued in 1986 (10) and 1990 (11). Significant changes mainly associated with the screening for HIV took place between 1986 and 1990. Firstly, the quarantine time for re testing of the donor was increased from 60 days to 180 days. The 1986 guidelines stated "the low risk associated with the guidelines warrants the continued use of fresh sperm with a higher pregnancy rate", however by 1990 the guidelines was ".....that under present circumstances the use of fresh semen for donor insemination is no longer warranted.....".

Both guidelines agreed that donors should be monetarily compensated but at a level that did not make money the main factor.

The concern about anonymity was addressed both in 1986 and 1990 regarding collection of the semen sample. It was suggested that the donor donate on or near the premises but separate from where the couple/recipient are located. Both guidelines called for permanent confidential records and the availability of non identifying donor information to the recipient and/or the child.

In 1987 the Congregation for the Doctrine of the Faith issued the Instruction on the Respect for Human Life and its Origin and on the Dignity of Procreation (12). The Instruction applied papal teaching to medically assisted reproduction and concluded that these technologies were morally illicit The Instruction called for the "reform of morally unacceptable civil laws for the correction of illicit practices".

The use of donor sperm was described as "Threatening the unity and stability of the family and as a source of dissension, disorder and unjustice in the whole social life". Further AID was rejected because it separated the unitive and procreative functions of marriage.

The Ethics Committee of AFS in 1988 (13) considered the objections raised in the Instruction and concluded that the use of donor sperm was a "justifiable relaxation of unity" of the genetic and birth components of procreation. The Committee stated that this was not a violation of the marriage. Further, as there was no evidence to support the assertion that AID damaged family relations or society and customarily donation was seen as a act of generosity the Committee rejected the Instruction portion.

In 1987 the Fertility Society of Australia (14) outlined their minimum criteria for screening of donors. This included a 3 month quarantine for HIV and a social history of the donor "which may be of assistance to parents of children at a later date".

In this period surveys were conducted with donors (15), (16), (17), (18), professionals (18), community (19) and patients (18), (20).

The three attitudinal surveys of donors all made note that there had been few studies of the characteristics, attitudes and needs of donors. Writers such as Daniels (16) attributed this to the fact that the donor was seen as a means to an end and was assumed to have no psychosocial needs.

Sauer et al (15) found that monetary consideration was the primary reason for donor participation whereas Daniels in both his surveys found other motivations were operating. The two surveys from 1989 (15) (17) found that overwhelmingly the donors were interested in knowing the outcome of their donations. Interestingly the Australian survey (17) (1989) found that 73% of donors would be still prepared to donate even if the children were able to trace their identity. The American Survey (15) (1989) found only 12% were prepared to allow this contact. This issue of "known donors" was surveyed by Sauer et al (21) with regard to the use of brothers as sperm donors. The authors found that couples undergoing AID generally rejected the use of the husband's brother as donor.

Kovacs et al (19) (1986) found that the community attitudes continued to be positive with half of the people saying that the child should be told. A close parallel was drawn between AID and adoption. A survey by Walker et al (18) (1987) addressed questions associated with the donors, patients, the child and the professionals. This survey indicated very restrictive attitudes to telling the child and the amount of donor information which should be available. The donor was considered as having little or no rights regards information or how his semen should be used. The parallels between adoption and AID were vigorously denied. These English results were in stark

contrast to the results obtained by Irwin et al (20) in which 41% of women patients wanted the child to have identifying information.

Daniels 1988 (22) in support of the contention that the child had a right to know added that deception damages family relationships and causes stress. He questioned if AID was purely a private act or was there a public component involved. He agreed with Elias and Annas (23) that the AID private contract paradigm was outdated and inadequate to protect the child, the parents, the family and social values. Daniels accused both the law and the medical profession of providing potential support for secrecy. The law by implying the husband was the biological father - ie. husbands name on the birth certificate. The medical profession via. the RCOAG which stated to parents:-
"Unless you decide to tell the child, there is no reason for him to ever know that he was conceived by AID. Whether or not you do so is entirely up to you" (24).

Warnock (25) called this advice "immoral", as well as stating her view that the conspiracy of silence was due to the confusion between sterility and virility.

Other writers to question the secrecy aspect included Matot and Gustin (26) and Noble (27). Matot and Gastin identified the paradox inherent in the secrecy when they stated "... the secret can only be kept on the condition that it is never forgotten, but always present in the mind of the keeper". These authors believed the correct time to disclose would be at the beginning of the child's latency period ie. approx. 6-7 years old.

Noble, a staunch advocate of known donors, rejected any attempt at secrecy or confusing the genetic lineage of the child.

Reznik (28) a social worker working with a donor insemination program found the patient concern with secrecy "alarming" and quoted Triseliotis, one of the most influential experts on adoption as support of more truth and openness in AID. Reznik called on medical practitioners to consider why collusion with the couples secrecy was more convenient than openness.

The lack of a script on how to tell a child had been commented on by Daniels 1988 (22). This lack was addressed in 1989 with the release of the book "How I Began. The story of Donor Insemination". The review of this book by McWhinnie (30) was positive but indicated gaps in the prevention such as not addressing the question of "What is a donor?"

Mahlstedt and Greenfield (31) in their excellent paper clearly identified the issues raised for patients by the use of donor sperm. The authors called for the preparation to include dealing with both the infertility as well as the donor issues. They attacked the idea of "donor anonymity" by suggesting that the donor needed to be personalised. This could be achieved by information being given to the child which would allow them to identify with their genetic heritage.

Karow (32) from Xytex Corporation in a letter commenting on Mahlstedt and Greenfield paper outlined a procedure to close the "genetic gap" created by secrecy and anonymity. This procedure was to freeze long term, diploid cells from the sperm donor. These cells would be made available to the child's physician. Karow believed the American social structure precluded personal contact between donor and recipient couple.

Back and Snowden (33) in a similar fashion to Mahlstedt and Greenfield related personal identity to information. These authors described the donor as "shadowy" with ill defined rights and duties and since AID was sanctioned by society asked did society have a duty to ensure disclosure to the child.

In conclusion they called the current conditions of secrecy and anonymity an anomaly. Biological identity in AID was also explored by Winkler and Midford (34) who concluded that the AID child must have the same rights as an adopted child and be told the truth. They stated that the priority of the couple's needs must be challenged absolutely and called on clinicians, counsellors and parents to practice and advocate open discussion.

Novaes (35), (1989) analysed semen donation in terms of gift giving and receiving. Novacs believed that the lack of a return gift put the practice of AID at risk and lessened its social legitimacy. Back and Snowden (33) had noted that only one couple in their survey of 899 had sent a gift for the donor whereas this was a common gesture of appreciation to the clinician. NovaEs stated that the lack of reciprocal gifts meant that the social tie was not defined and this created a dilemma. She was concerned that the donor was being asked to contribute without society defining and recognizing this contribution. The author called for better preparations so that donors may have a chance to consider their motivation and the meanings of donations for them. These meanings may be different for different men at different times of their lives.

Daniels 1986 (36) also addressed the meaning of donation to donors and presented a "relationship model" to show how the donor was involved in a series of relationships. These relationships included the donor himself, the staff, his partner, the couple, the network and the community. The paper argued for greater recognition for the donor and for a more comprehensive counselling service. This paper quoted Asche (1985) that known related donors should not be permitted whereas known unrelated donations could be used.

Dr Marc Christiaens (37) determined that there was a philosophical anomaly associated with AID ie. sperm which carry the characteristics of the donor, being made into an object which can be used by a subject in any manner or even handed on to another person. Christiaens questioned whether an anonymous donor can renounce all interest in and responsibility for those who are his children.

The gift of the sperm thus no longer has any reference to the giver. The sperm was reduced to a neutral element. In conclusion, the author called for AID to be given with the greatest care for the interests of the parents, child and donor.

Hanmer (38) 1987 raised the illegitimacy and inheritance issues associated with AID. It was noted that if there was a shift for the child from illegitimate to legitimate, legal control would shift from the mother to the social father. It was further pointed out that the criteria of "fit mother" was not balanced by a corresponding criteria of "fit father".

Learner (39) in her paper discussed common issues between adoption and the reproductive technologies. The "access to services" question was resolved by the writer concluding that the most satisfactory parenting arrangement known is a heterosexual partnership. The central question was seen as "whose interests are predominant?" the parents or the child's. The author believed that the need for genetic information outweighed any privacy consideration.

Selection criteria for patients was also the concern of Freedman et al (40). They concluded that there was a moral dimension of patient selection and questioned whether this was ethical. Bayles (41) had suggested that no more control should be imposed on AID than on copulation. This radical conclusion was rejected on the grounds that "artificial" implied involvement of a 3rd party ie. a clinician or nurse.

The writers called for more research on the ethical views of physicians otherwise public policy would be developed in a vacuum.

In 1988 De Parseval and Fagot-Largeault (42) outlined the divergent ways the parties to DI were treated in various countries. The countries were France, Sweden, West Germany and Australia (Victoria). The article concluded that the Victorian Infertility Act 1984 (43) was an outcome of "this Australian Community had become aware that the present implications of procreative technology are too serious to be left to the choice of individuals even if they are doctors".

Further evidence of this awareness could be seen in the publications of The National Bioethics Consultative Committee (44) (45) in which the issue of Record Keeping and Access to Information for AID offspring was discussed. These reports raised some options for Access and did believe that the analogy between adoption and use of donor sperm was valid.

Annas & Elias (23) noted that AID had become widely accepted but this had not solved the problems such as lack of adequate laws relating to AID or adequate methods of selecting couples or screening of donors. These authors believed that commissions like Warnock and Waller had placed the parental rights above the best interests of the child.

In 1986 the New South Wales Law Reform Commission issued its report on Human Artificial Insemination (46). In general the Commissioner was not in favour of direct legislative action regarding AID however it recommended legitimacy for the child, no sperm mixing or action to confuse the child's parentage and no central registry.

This was in contrast to the Register suggested by the Waller Committee in Victoria. Lumley (47) reviewed this Register and noted the comparison with the release of identifying information in adoption. Her concluding remark that information stored but not used and analyses not acted upon are a waste seemed not to be mindful of the needs of DI children.

Period Summaries pre1941–1990

BEFORE 1941

From 1909 to 1941 even though few papers were obtained by this survey a strongly negative reaction to the use of donor sperm was observed.

This negativity was based on a Natural Law condemnation of the practice. The introduction of a third party into the marriage (adultery) and the necessity of masturbation were cited as the reasons for this condemnation. The secular concerns were questions around the confused status of the child. Further some writers saw the procedure as unnecessary because there were children available for adoption.

1941 - 1950

This period saw the continued recourse to a natural law condemnation of AID. The availability of children for adoption was again used as the reason for viewing AID as unnecessary. Concerns were raised by possible consanguinous marriages both from a moral as well as a legal viewpoint.

The procedure was now being firmly placed within the medical ambit and this gave rise to questions about the doctors liabilities and responsibilities. These questions and concerns have been a constant thread in the literature from 1941 to the present day.

1951-1960

The debate in this period moved into a more public arena by the holding of a Symposia to discuss the issues surrounding AID. There was a softening of attitudes at least in the medical literature as well as a move towards considerations regarding process. Thus the questions began to change from "Is AID morally right?" to "How should AID be carried out?"

This move gave rise to the first questions about couple selection and preparation.

The shift to a more lenient view was evident in the writings of such people as Fletcher - perhaps the first apologist for AID.

Legal questions such as those associated with child status, wills, inheritance were still being asked but no answered.

1961-1970

With the beginning of couple selection and preparation issues commentaries from psychiatric/psychological viewpoints were the next logical step. These papers expressed a divergence of views about the dangers of AID to the family and society. The discussion began about issues such as secrecy and whether the child had a right to know. Before this time it seemed that it had been taken for granted that secrecy was the best policy. By this period the procedure had become fully medicalised and the concomitant questions regarding the clinicians responsibilities continued to be debated. It is interesting to note that all the commentators unquestioningly accepted that AID should be seen as a medical procedure and that the medical profession should hold an inordinate amount of power and control in the delivery of the service. eg. (a) who should have access to the service or
(b) the selection of donors.

1971 - 1976

By this time AID was largely seen as acceptable although the Catholic Church was consistent in its condemnation of the procedure. Overall it was now being suggested that the righteousness or wrongness of AID should be measured by its effects. Thus a more consequential approach was being employed to determine the moral acceptability of AID. It seemed that about this time the medical profession in general tired of the discussion of ethical issues and thus left the arena to ethicists such as G.R. Dunstan. Questions about the validity of the secrecy surrounding the procedure continued to be hotly debated with a growing number of writers calling for more openess. The development of commercial sperm freezing crystallised discussions about eugenics and donor issues such as screening. The beginnings of questions relating to the donors part in the process were also evident.

The legal system continued to be tardy in their approach and the confused laws continued to be a source of concern.

1977-1980

The interest in "donor issues" continued to develop in this time. Discussions centred on the donor psychology and the donors possible needs. The issues associated with secrecy of the procedure were now being questioned by other professional groups such as social workers. The power of the medical profession to withold the service was now being seriously questioned. A suggestion to demedicalise the procedure (Annas) was not picked up by other writers. This questioning of the medical professions position was accompanied by the doctors continued withdrawal from discussions regarding ethical issues.

1981-1985

The discussion of who should have access to the service (eg. single women, lesbian couples) continued with many writers concluding that to refuse treatment would be immoral. The secrecy debate continued with more commentators calling for greater openess and discussion. A number of writers called on the medical profession to initiate this openess. An increased awareness of the need for psychological preparation of both donors and couples was evident in that most authors sought increased counselling services to be made available.

Major Committees such as Warnock & Waller met and made recommendations on the operation of AID. These recommendations probably acted as catalysts for such legislation as was enacted in Australia at this time.

The medical profession in this period busied itself with attitudinal surveys most of which indicated positive results towards the use of AID.

1986 - 1990

The major issue for this period has been the screening and preparation of donors. The screening especially for the HIV virus was associated with the protection of the interests of the child.

The advocates for openess and less secrecy became more vocal and ideas on how and when to tell the child were forthcoming. This move towards openess and access to information was confirmed in Australia by the Victorian Register and by reports by the National Bioethics Consultative Committee. These moves have been mirrored in few other countries.

Medical professional bodies seemed to have been reluctant to recommend openess although this may reflect the view of their membership. Professional bodies have, however, set down guidelines for the implementation of AID services.

1990 ONWARDS

It is only conjecture as to what direction the ethical debate will take and what issues will be debated in the future. However, the following is postulated. The use of known sperm donors will become more widespread as the trend towards openess continues. This trend will be facilitated by the corresponding trend in the adoption area. This trend will not be without difficulty as the participants in AID (ie. couple, the donor and medical team) battle to balance the rights and needs of the child, the donor and his family, the team and the couple.

The increased use of known sperm donors will bring new issues to the discussion. These issues will include new definitions of "family", the ongoing participation of the donor in the couple's family, the relational issues inherent in this situation.

The use of donor sperm will be extended to include:-

(a) treating the partners of HIV positive males,
(b) treating single women
(c) treating women in lesbian couples.
(d) treating couples to eliminate hereditary traits.

These extensions will test the issue of "clinicans responsibilities to the best interests of the child" as our traditional ideas are challenged.

Access questions such as those above will further undermine the clinicans power position as anti discriminatory laws take effect.

The final issue postulated is that of the preparation and counselling of donor wives. Traditionally the donor has been seen as an autonomous being who could dispose of his sperm as he wished. This view will be challenged as sperm donation is seen more in a social context rather than as a personal act.

REFERENCES - INTRODUCTION

1. Beck W. "Two Hundred Years of Artificial Insemination". Fertil. & Steril. 41 (2):198, 193-5.

2. Fletcher J. "Morals & Medicine" 1954 Beacon Press. Boston. Pg 100-140.

3. Watters W. and Souza-Posa J. "Psychiatric Aspects of Artificial Insemination (Donor)". Canad. Med. Ass. J. (July 16), 95. 1966. Pg 106-113.

4. Rubin B. "Psychological Aspects of Human Artificial Insemination". Arch. Gen. Psychiat. 13 Aug. 1965. Pg 121-132.

5. Levine R. "Artificial Insemination Donor: A Constitutional Model". Legal Medicine 1985.

6. Pollock M. "Sex and its problems". Practitioner 199, (190). 1967 Pg 244-252.

7. Hasegawa T. et al. (eds). "Fertility & Sterility" 1973, Elsevier : New York.
Tekavcic B. "Are there any psychological consequences in husband, wife and donor after AID?" 962-4.

8. Bonythorn A. "Artificial Insemination - An Alternative to Adoption" Australian Child & Family Welfare, 1, (18), 1976 18-9.

9. Stone O. "English law in relation to AID & Embryo Transfer" p 69-76 in G.
Wolstenholme & D. Fitzsimmons (eds). Associated Scientific Publishers. Amsterdam.

10. Glezerman M. "Two Hundred & Seventy Cases of Artificial Donor Insemination : Management and results". Fertil. & Steril. 35 (2): 1981 180-7.

11. Thompson W. & Boyle D. "Counselling Patients for Artificial Insemination and Subsequent Pregnancy". Clinics in Obstetrics and Gynaecology 9 (1) : 1982 Pg 211-225.

12. Peyser H. "Untoward Effects of Artificial Insemination". N.Y. State Journal of Medicine. July 15, 1965. 1876 - 79.

13. Berger D. "Psychological Aspects of Donor Insemination". Int'l. J. Psychiatry in Medicine 12 (1) : 1982. Pg 49-57.

REFERENCES BEFORE 1941

1. Rubin B. "Psychological Aspects of Human Artificial Insemination". Arch. Gen. Psychiat., 13 Aug 1965 Pg 121-132.

2. Seashore R. "Artificial impregnation". Minnesota Medicine 1983. 641-44.

3. Editorial: "Artificial Insemination and Illegitimacy". J.A.M.A. May 6, 1939. 1832-3.

4. Notes: "Artificial Insemination". J.A.M.A. 110. (2) : 1938 1857.

5. Kelly G. "The Morality of Artifical Insemination". The Ecclesiastical Review 101. 1939. Pg 109-118.

6. Russell v Russell 13. British Ruling Cases 246. H.L. App. Cas. 687 (1924).

7. Orford v Orford. 49 Ont. L.R. 15 (1921).

REFERENCES 1941 - 1950

1. Editorial. "Artifical Insemination versus Adoption". Virginia Law Review 34: 1948a Pg 822-829.

2. Connell F. "Artificial Insemination". The American Ecclesiastical Review. Vol. CXll. Jan-June 1945. Pg 140-141.

3. Kelly G. "Moral Aspects of Artifical Insemination". The Linacre Quarterly 14:1. 1947. Pg 19-24.

4. Editorial: "Problems in Artifical Insemination". N.Y. State J.M. March 15, 1948. Pg 600-602.

5. Editorial: "Artifical Insemination". B.M.J. 3rd May 1947. 605.

6. Regular Correspondant: "Foreign Letters". J.A.M.A. 135. 1947. 729.

7. New York Sanitary Code 112.

REFERENCES 1951 - 1960

1. Editorial: "Medicolegal aspects of artifical insemination". J.A.M.A. 147, 3. 1951. Pg 250-253.

2. Foreign Letters J.A.M.A. 154. 2. 1954. 779-80.

3. Editorial. "Comment on Departmental Comment on Human Artificial Insemination". The Lancet 1906b Pg 247-248.

4. Kleegman S. "Therapeutic Donor Insemination". Fertil. & Steril. 5, 1954. 7 - 30.

5. Fletcher J. "Morals & Medicine". 1954. Beacon Press. Boston Pg 100-140.

6. "Symposium on Artificial Insemination". Syracuse Law Review. 1955. Pg 96-113.

7. Souval P. "Artificial Insemination. A Review of Opinions on its Moral Validity". Medical Arts & Sciences. 3rd Quarter 1959. Pg 119-125.

REFERENCES 1961 - 1970

1. Gerstal G. "A Psychoanalytic View of Artifical Donor Insemination". Am. Journal of Psychotherapy 17: 1964. Pg 64-67.

2. Sants H. "Genealogical bewilderment in children with substitute parents". Brit. J. Med. Psychol. 37: 1964 Pg 133-140.

3. Rubin B. "Psychological Aspects of Human Artifical Insemination". Arch. Gen. Psychiat. 13 Aug, 1965. Pg 121-132.

4. Fish S. "Continuing Problems of Artifical Insemination". Postgraduate Medicine Oct 1965. Pg 415-420.

5. Peyser H. "Untoward Effects of Artifical Insemination". N.Y. State Journal of Medicine. July 15, 1965. 1876-79.

6. Watters W. and Souza-Posa J. "Psychiatric Aspects of Artifical Insemination (Donor)". Canad. Med. Ass. J. (July 16), 95. 1966. Pg. 106-113.

7. Levine L. "An inquiry into the Psychological Effects on Parents of Artifical Insemination using Donor Semen". Eugenics Review 59 (2) 1967. Pg 96-106.

8. Pollock M. "Sex and its problems". Practitioner Vol. 199, No. 190. 1967. Pg 244-252.

9. Stallworthy J. "The right to live". J. Roy. Coll. Gen. Practit., 19, 1970. 187.

10. Berger H. "The Ethics of Future Medical Practice". Pol. Arch. Med. Wewn., 44, 1970. Pg. 416-424.

REFERENCES 1971 - 1976

1. Weinstock N. "Artificial Insemination - The Problem and the Solution". Family Law Quarterly 5 : 1971, 369-402.

2. Revillard M. "Legal Aspects of Artifical Insemination and Embryo Transfer in French Law". International & Comparative Law Quarterly 23, 1974. 383-96.

3. David A & Arvidan D. "Artifical Insemination Donor : Clinical & Psychologic Aspects". Fertil. & Steril. 27 (5) 1976. Pg 528-531.

4. Hasegawa T. et al. (eds). "Fertility & Sterility" 1973, Elsevier : New York.
Tekavcic B. "Are there any psychological consequences in husband, wife and donor after AID?" 963-4.

5. Nijs P. & Rouffa L. "A.I.D. Couples - Psychological and psychopathological evaluation". Andrologia 7 (3): 1975, Pg 187 - 194.

6. Schroeder L. "New Life: Person or Property?" Am. J. of Psych. 131 (5) 1974. 541-4.

7. Assael A. & Palti Z. "Post Partum Mental Disturbance Due to Artficial Insemination by Donor". The Family. 4th Int. Congr. of Psychosomatic Obstetrics and Gynaecology Tel Aviv. 1974. Pg 226-232.

8. Bonythorn A. "Artificial Insemination - An Alternative to Adoption". Australian Child & Family Welfare, 1, (18), 1976. 18 - 9.

9. Chong A. and Taynor M. "Sixteen Years Experience with Therapeutic Donor Insemination". Fertil. & Steril. 26, (8), 1975. 791-94.

10. Editorial: "Artificial Insemination". Brit. Med. J. 4. (5987). 1975, 2-3.

11. Frankel M. "Role of Semen Cryobanking in American Medicine". Brit. Med. J. 3, (5931). 1974. 619 - 21.

12. Dunstan G. "Moral & social issues arising from AID". p 47-67 in G. Wolstenholme & D. Fitzsimmons (eds). Law & Ethics of AID & Embryo Transfer. 1973. Associated Scientific Publishers : Amsterdam.

13. Dunstan G. "Ethical aspects of donor insemination". Journal of Medical Ethics. 1 (1) : 1975. 42 - 4.

14. Dunstan G. "Ethical Issues relating to AID" p 182-191. J.H. Brudenell et al (eds). Artificial Insemination 1976 Royal College of Obstetricians & Gynaecologists : London.

15. Titmuss R. The Gift Relationship: From Human Blood to Social Policy . 1971 Pantheon. New York.

16. McClaren A. "Biological aspects of AID". p 3-10 in G. Wolstenholme & D. Fitzsimmons (eds) Law & Ethicss of AID & Embryo Transfer. 1973. Associated Scientific Publishers. Amsterdam.

17. Piattelle - Palmarini M. "Biological roots of the human individual". p 19-25 in G. Wolstenholme & D. Fitzsimmons (eds.) Law & Ethics of AID & Embryo Transfer. 1973. Associated Scientific Publishers. Amsterdam.

18. Fried C. "Ethical issues in existing and emerging techniques for improving human fertility". p 41-45 in G. Wolstenholme & D. Fitzsimmons (eds.) Law & Ethics of AID & Embryo Transfer. 1973. Associated Scientific Publishers. Amsterdam.

19. Stone O. "English law in relation to AID & Embryo Transfer". p 69-76 in G. Wolstenholme & D. Fitzsimmons (eds.) 1973. Associated Scientific Publishers. Amsterdam.

20. Louras N. "Against Heterologues Insemination". International Surgery (3) March. 1973. 190-1.

21. Editorial: "Genetic Engineering : Reprise". J.A.M.A. 220, (10): 1972. 1356-7.

22. Horne H. "Artificial Insemination, donor. An issue of ethical and Moral Values". New England Journal of Medicine 293, (17), 1975. 873-4.

23. Short R. "Focus: Current Issues in Medical Ethics". Journal of Medical Ethics, 1, 1975, 56-58.

REFERENCES 1977 - 1980

1. Blizzard J. "Blizzard and the Holy Ghost". Artificial Insemination: A Personal Account. Peter Owen. London 1977.

2. Harvey B. & Harvey A. "How couples feel about donor insemination". Contemporary Obstetrics & Gynaecology. 9. 1977 93-7.

3. Duncan A., Duncan G., Welbourn (eds.) Dictionary of Medical Ethics. Darton, Longman & Todd 1977. 18-22.

4. Editorial. "Artificial Insemination by Donor". South African Medican Journal 53. (25): 1978 1006.

5. Reports: "Suggested Code of Practice for Artificial Insemination by Donor (AID)" South African Medical Journal 8 November 1980. 781-83.

6. Rosner F. "Sperm procurement and analysis in Jewish Law". Am. J. Obstet. Gynaecol. 130 (6): 1978 627-29.

7. Amelar R. et al. "Male Infertility Practice & Orthodox Jewish Law". Urology 10 (2): 1977. 177-80.

8. Stone S. "Complications & Pitfalls of Artificial Insemination" Clinical Obstetrics & Gynaecology 23 (4) 1980 667-682.

9. Brandon J. & Warner J. "A.I.D. & Adoption: Some Comparisons". British Journal of Social Work. 7 (3) 1977 335-41.

10. Brandon J. "Telling the AID child". Adoption & Fostering 90: 1979. 13-14.

11. Bonython A. "Facing decisions in an Artificial Inseminaiton by Donor Programme". Australian Child & Family Welfare. 2 (3): 1977. 47-51.

12. Cosgrove I. "AID for Lesbians". British Medical Journal. 2 1979 495.

13. Templeton A. "AID - What are the Problems". Midwife, Health Visitor and Community Nurse 13: July 1977 208-11.

14. Smith H. "Threats to the individual". Social Science & Medicine. 11 (8-9): 1977 449-51.

15. Annas G. "Artificial Insemination: Beyond the best interests of the Donor". Hastings Centre Rep, 9, Aug 79 14-15.

16. Soane B. "The literature of Medical Ethics: Bernard Harving". Journal of Medical Ethics 3, 1977 85-92.

17. Karp L. "Eutelegenesis: A Historical Perspective". American Journal of Medical Genetics 5: 1980. 327-329.

18. Walters W. "Ethical Aspects" in C. Wood et al (eds.). Artificial Insemination by Donor. Monash University Melbourne 1980.

19. Macourt D. "Artificial Insemination with Donor Semen". The Medical Journal of Australia. 1: 1977 693-95.

20. Friedman S. "Artificial Donor Insemination with Frozen Human Semen". Fertil. & Steril. 28 (11) 1977 1230-33.

21. Behrman S. "Artificial Insemination" Clinical Obstetrics & Gynaecology. 22 (1) 1979 245-53.

22. Clayton C. & Kovacs G. "AID - A Pretreatment Social Assessment". Aust. N.Z. J. Obstet. Gynaec. 20 (208): 1980 208-10.

23. Berger D. "Couples Reactions to Male Infertility & Donor Insemination". Am. J. Psychiatry 137 (9): 1980 1047-49.

REFERENCES 1981- 1985

1. Hanscombe G. "The right to lesbian parenthood". J. Med. Ethics 9 (3) 1983. 133-5.

2. Ooms T. "AID & the Single Welfare Mother". Hastings Centre Report 13 (4) 1983. 22-3.

3. Strong C. & Schinfield J. "The Single Woman & Artificial Insemination by Donor". The Journal of Reproductive Medicine 29 (5): 1984 293-99.

4. Fletcher J. "Artificial Insemination in Lesbians. Ethical Considerations". Arch. Intern. Med. 145: 1985. 419-20.

5. McGuire M. & Alexander N. "Artificial Insemination of Single Women". Fertil. & Steril. 43 (2) 1985 182-4.

6. Snowden R. & Mitchell G. The Artificial Family. George Allen and Unwin. London. 1984.

7. Snowden R., Mitchell G. and Snowden E. Artificial Reproduction: A Social Investigation. George Allen & Unwin. Lond. 1983.

8. Snowden R. & E. The Gift of A Child. George Allen & Unwin. London. 1984.

9. Scott R. "Who Am I?" (Children with Problems of Identification including Adoption, I.V.F. and A.I.D.) A paper delivered on 2.3.1984 at the Combined Anual Congress of the Australian Society for Psychosomatic Obstetrics & Gynaecology and the Biological Sciences Committee of the Australian Federation of Family Planning Associations.

10. Harper P. & Aitken J. (eds.) A Child Is Not The Cure for Infertility: Workshop on Infertility. Institute of Family Studies. Melbourne. 1982.

11. Di Giantomasso F. (ed.) Procedures of the Conference: Ethical Implications in the use of Donor Sperm, Eggs & Embryos in the Treatment of Human Infertility. Monash Centre for Human Bioethics. Melbourne. 1983.

12. Cushan A. Proceedings of the Conference Adoption & A.I.D.: Access to Information. Monash Centre for Human Bioethics. Melbourne. 1983.

13. Jansen R. "Sperm & Ova as Property". Journal of Medical Ethics. 11 1985. 123-26.

14. Grobstein C. Flower M. "Current Ethical Issues in IVF". Clinics in Obstetrics & Gynaecology 12 (4): 1985. 877-891.

15. Feldman E. "Medical Ethics the Japanese Way". Hasting Centre Report. 15. 15: 1985. 21-4.

16. Rowland R. "Attitudes & opinions of donors on an Artificial Insemination by Donor (AID) Programme." Clinicial Reproduction & Fertility 2. 1983. 249-59.

17. Kovacs G. et al. "The attitudes of Semen Donors". Clinical Reproduction & Fertility 2, 1983. 73-75.

18. Nicholas M. & Tyler J. "Characteristics, Attitudes & Personalities of AI Donors". Clinical Reproduction & Fertility 2: 47. 1983. 47-54.

19. Handelsman et al. "Psychological & Attitudenal Profiles in Donors for Artificial Insemination". Fertil. & Steril. 43 (1): 1985. 95-101.

20. Leiblum S. & Barbrack C. "Artificial Insemination by Donor: A Survey of Attitudes & Knowledge in Medical Students & Infertile Couples". J. Biosoc. Sci. 15 (2): 1983. 165-72.

21. Rosenkvist H. "Donor Insemination". Danish Medical Bulletin 28 (4): 1981. 133-48.

22. Glezerman M. "Two Hundred & Seventy Cases of Artificial Donor Insemination: Management & Results". Fertil. & Steril. 35 (2): 1981. 180-87.

23. Ledward et al. "Social & Environmental Factors as Criteria for Success in Artificial Insemination by Donor (AID)." J. Biosoc. Sci. 14, 1982. 263-275.

24. Milsom I. & Bergman P. "A Study of Parental Attitudes After Donor Insemination (AID)". Acta Obstet. Gynaecol. Scand. 61: 1982. 125-28.

25. Clayton C. & Kovacs G. "AID offspring - Initial follow up of 50 Couples". The Medical Journal of Australia 1; 1982. 338-39.

26. Reading A. et al. "A Survey of Patient Attitudes Towards Artificial Insemination by Donor". Journal of Psychosomatic Research. 26 (4) 1982. 429-33.

27. Leeton J. & Blackwell J. "A Preliminary follow-up of parents and their children conceived by Artificial Insemination by Donor (AID)". Clinical Reproduction and Fertility 1. 1982. 307-10.

28. Jones W. "Artificial Insemination by Donor". (Letter). Med. J. Aust. 141 (5): 1984. 317.

29. Tyler J. et al. "Some attitudes to Artificial Insemination by Donor". Clinical Reproduction & Fertility 2. 1983. 151-160.

30. Rawson G. "Human Artificial Insemination by Donor & the Australian Community". Clinical Reproduction & Fertility 3. 1985. 1-19.

31. Rowland R. & Ruffin C. "Community attitudes to Artificial Insemination by husband or donors in vitro fertilization and adoption." Clinical Reproduction & Fertility. 2. 1983. 195-206.

32. Palm T. "Legal Implications of Artificial Conception - Making Babies Makes Law". The Medical Trial Technique Quarterly 28, (4) 1982. 404-23.

33. Wright E. & Shaw M. "Legal Liability in Genetic Screening and Prenatal Diagnosis". Clinical Obstetrics & Gynaecology 24. (4) 1981. 1133-49.

34. Levine R. "Artificial Insemination Donor: A Constitutional Model". Legal Medicine 1985.

35. Brahrams D. "Medicine & the Law. In Vitro Fertilization & related research. Why Parliament must legislate". Lancet 2, (8352): 1983. 726-9.

36. Somerville M. "Birth Technology, Parenting & "Deviance". International Journal of Law & Psychiatry 5. 1982. 123-153.

37. N.S.W. Artificial Conception Act, 1984, No.3.

38. Regeringsproposition om Artificiella Inseminationer. 1984/85 : 2 (Government Bill on Artificial Inseminations).

39. Editorial. "The Warnock Committee" British Medical Journal (Clinical Research) 289. (6439): 1984. 238-9.

40. Warnock M. "Moral thinking & Government Policy. The Warnock Committee on Human Embryology" Milbank Memorial Fund Quarterly Health & Society 63 (3): 1985. 504-22.

41. Waller L. (Chairman). The Committee To Consider The Social, Cultural, Ethical & Legal Aspects of In Vitro Fertilization. 1984.

42. Hulka J. (Chairman). Report of the Ad Hoc Committee on Artificial Insemination. The American Fertility Society. 1981.

43. Report from Council for Science & Society. Lancet 1. (8389): 1984. 1290.

44. Daniels K. "Artificial Insemination by Donor & its Implications for Social Work". Social Work Issues for the 1980's. Department of Sociology. University of Canterbury 1981.

45. Stewart C., Daniels K. & Boulnois J. "The development of a psychosocial approach to artificial insemination of donor sperm". New Medical Journal 95: 1982. 853-6.

46. Macnaughton M. "Artificial Insemination by Donor". (Comment). Scottish Medical Journal 27 (2): 1982. 109-10.

47. Berger D. "Psychological Aspects of Donor Insemination". Int'l. J. Psychiatry in Medicine. 12 (1) 1982. 49-57.

48. Davis J. & Brown D. "Artificial Insemination by Donor (AID) & the use of Surrogate Mothers". Mothers - Social & psychological impact (Community). West. J. Med. 1984. Jul; 141: 127-30.

49. Waltzer H. Psychological & Legal Aspects of Artifical Insemination (A.I.D.): An Overview". American Journal of Psychotherapy 36 (1) 1982. 91-102.

50. Corson S. and Batzer F. & Baylson M. "Donor Insemination". Obstetrics & Gynaecology Annual 12: 1983. 283-309.

51. Beck W. "Two Hundred Years of Artifical Insemination". Fetil. & Steril. 41 (2): 1984. 193-95.

52. Hulka J. "Donor Insemination: Guidelines for uncharted territory (editorial)". Fertil. & Steril. 35 (5): 1981. 500-1.

53. Worsnop D. et al. "Human artificial insemination: Donors in Melbourne. From our medical schools". Aust. Fam. Physician 11 (3) 1982. 218, 220-24.

54. Allen D. and Alperstein A. & Tsalacopoulos G. "Artificial Insemination by Donor at Groote Schuur Hospital". South African Medical Journal 67: 1985. 284-87.

55. Thompson W. & Boyle D. "Counselling Patients for Artificial Insemination & Subsequent Pregnancy".

56. Olshansky E. & Sammons L. "Artificial Insemination: An Overview". Journal of Obstetrical, Gynaecological & Neonatal Nursing (Supplement) Nov-Dec. 1985.

REFERENCES 1986 - 1990

1. Mascola L. & Guinan M. "Screening to Reduce Transmission of sexually transmitted diseases in semen used for artificial insemination". N. Eng. J. Med. 314, 1986. 1354-9.

2. Greenblatt et al. "Screening therapeutic insemination donors for sexually transmitted diseases: Overview & Recommendations". Fertil. & Steril. 46 (3): 1986. 351-64.

3. Hummel W. & Talbert L. "Current Management of a donor insemination program". Fertil. & Steril. 51 (6): 1989. 919-30.

4. Ryan K. "Ethical issues in reproductive endocrinology & infertility". Am. J. Obstet. Gynaecol. 160 (6): 1989. 1415-17.

5. Sokoloff B. "Alternative Methods of Reproduction". Clinical Pediatrics 26 (1): 1988 11-17.

6. Andrews L. "Ethical & Legal Aspects of In Vitro Fertilization & Artificial Insemination by Donor". Urologic Clinics of North America 14 (3): 1987. 633-42.

7. Rosner F. et al. "Ethical considerations of reproductive technologies". Committee Report. New York State Journal of Medicine 87. (7): 1987. 398-401.

8. Ethics Committee of the American Fertility Society. "Ethical Considerations of the new reproductive technologies". Fertil. & Steril. 46 (3): (Suppl 1): 1986 1-94 S.

9. Ethics Committee of the American Fertility Society. "Ethical Considerations of the new reproductive technologies". Fertil. & Steril. 53 (6): (Suppl 2) 1990 1-99 S.

10. The American Fertility Society "New Guidelines for the use of Semen Donor Insemination : 1986". Fertil. & Steril. 46 (4): (Suppl 2) 1986 95-103 S.

11. The American Fertility Society "New Guidlines for the Use of Semen Donor Insemination: 1990". Fertil. & Steril. 53 (3): (Suppl 2) 1990 1-13 S.

12. Congregation for the Doctrine of the Faith "Instruction on the Respect for Human Life in its Origin and On the Dignity of Procreation". Vatican 1987.

13. The Ethics Committee (1986-87) of the American Fertility Society. "Ethical considerations of the New Reproductive Technologies - In the light of Instruction on the Respect for Human Life in its Origin and on the Dignity of Procreation". Fertil. & Steril. 49 (2): (Supple 1). 1988 1-7 S.

14. Newsletter - "Screening for Donor Insemination". Fertility Society of Australia - 1987.

15. Sauer M. et al. "Attitudinal Survey of Sperm Donors to an Artificial Insemination Clinic". Journal of Reproductive Medicine 34 (5) 1989. 362-64.

16. Daniels K. "Semen Donors in New Zealand: Their characteristics and attitudes". Clinical Reproduction and Fertility 5, 1987. 177-190.

17. Daniels K. "Semen Donors: Their Motivation & Attitudes to their Offspring". Journal of Reproductive & Infant Psychology 7. 1989. 121-27.

18. Walker A. et al. "Attitudes towards donor insemination - A post Warnock survey". Human Reproduction 2 (8): 1987. 745-50.

19. Kovacs G. et al. "Community attitudes to Artifical Insemination by Donor". Aust. Fam. Physician 15 (1): 1986. 50-1.

20. Irwin et al. "Donor Insemination Couples. Thoughts on Sperm Donors Being Identifiable". A paper delivered at the Proceedings of the 8th Annual Scientific Meeting of the Fertility Society of Australia 1989.

21. Sauer M. et al. "Survey of attitudes regarding the use of siblings of gamete donation". Fertil. & Steril. 49 (4): 1988. 721-22.

22. Daniels K. "Artificial Insemination". Social Science & Medicine. 27 (4) 1988. 377-83.

23. Annas G. & Elias S. "The Treatment of Infertility: Legal & Ethical Concerns". Clinical Obstetrics & Gynaecology 32 (3): 1989. 614-21.

24. Royal College of Obstetricians & Gynaecologists. "Artificial Insemination". Explanatory Booklet for Patients. R.C.O.G. London. 1979.

25. Warnock M. "The Good of the Child". Bioethics 1 (2) 1987. 141-55.

26. Matot J. & Gustin M. "Filiation & secrecy in artificial insemination with donor". Human Reproduction 5 (5) 1990. 632-33.

27. Noble E. "Having Your Baby by Donor Insemination. A Complete Resource Guide". Houghton Mufflin Company. Boston 1987.

28. Reznik F. Letters to Editor Aust. N.Z. J. Obstet. Gynaecol. 29 (183): 1989.

29. Paul J. (ed.) How I Began. The Story of Donor Insemination. Fertility Society of Australia. 1989.

30. McWhinnie A. "What is the hidden agenda." Adoption & Fostering 13 (2): 1989 66-8.

31. Mahlstedt P. & Greenfeld D. "Assisted Reproductive Technology with donor gametes: The need for patient preparation". Fertil. & Steril. 52 (6): 1989. 908-914.

32. Karow A. Letter to the Editor. "Avoiding a "Genetic Gap" in Assisted Reproductive Technology". Fertil. & Steril. 53 (5): 1110.

33. Back K. & Snowden R. "The anonymity of the gamete donor". Journal of Psychosomatic Obstetrics & Gynaecology. 9 (1988) 191-98.

34. Winkler R. & Midford S. "Biological Identity in adoption, Artificial Insemination by donor (A.I.D.) and the New Birth Technologies". Australian Journal of Early Childhood. 11 (4) 1986. 43-8.

35. Novacs S. "Giving, Receiving, Repaying. Gamete Donors & Donors Policies in Reproductive Medicine". Intl. J. of Technology Assessment in Health Care. 5 1989 639-57.

36. Daniels K. "Psychosocial Issues associated with being a semen donor". Clinical Reproduction & Fertility. 4 1986 341-51.

37. Christiaens M. "Artificial Insemination by donor & the view of Man". European Journal of Obstetrics & Gynaecology & Reproductive Biology. 28 1988 347-52.

38. Hanmer J. "Reproduction trends". Social Science & Medicine 25 (6): 1987 697-704.

39. Learner E. "Social Issues Common to Adoption & the New Reproduction Technologies". Australian Journal of Early Childhood 11 (4) 1986. 37-42.

40. Freedman et al. "Non medical selection criteria for artificial insemination and adoption". Clinical Reproduction & Fertility 5 1987 55-66.

41. Bayles M. Reproductive Ethics Prentice Hall. New Jersey 1984.

42. De Parseval G. & Fagot-Largeault A. "The Status of Artificially Procreated Children: International Disparities". Bioethics 2 (2): 1988 136-50.

43. Infertility (Medical Procedures) Act Victoria. Acts 1984 No 10163.

44. Layton R. (Chairperson) Access to Information. An analogy between adoption and the use of Gamete Donation. The National Bioethics Consultative Committee Dec 1988.

45. Layton R. (Chairperson) Reproductive Technology. Record Keeping and Access to Information. Birth Certificates and Birth Records of offspring born as a Result of Gamete Donation. The National Bioethics Consultative Committee August 1989.

46. Artificial Conception. Report 1. Human Artificial Insemination. LRC 49. New South Wales Law Reform Commission 1986.

47. Lumley J. "The proposed Victorian Donor Gamete Register". Clinical Reproduction & Fertility. 4 1986 39-43.