A comparison of single and married recipients of donor insemination

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Introduction

Donor insemination (DI) has been a treatment option for couples with male infertility for the past 100 hundred years (Rubin, 1965). It is estimated that up to 30,000 children are born each year in the US as a result of DI (US Congress, 1988). Several studies have been conducted to determine the psychological and social characteristics of couples choosing DI as a means of family-building, but heterosexual couples are not the only ones seeking DI (Amuzu et al., 1990; Klock and Maier, 1991; Klock et al., 1994). Single women are increasingly requesting DI from physicians in infertility clinics (Pakizegi, 1990) but debate continues regarding the legal, ethical and psychological implications of this practice (Strong and Schinfeld, 1984; Leiblum et al., 1995). Some have reported that single women seeking DI may be rejected for treatment because they have inadequate relationships or social supports, traumatic and unresolved family histories and an unhealthy desire for a child (Rosenthal, 1990; Englert, 1994). Other concerns regarding single DI recipients include possible limited financial resources, psychological instability, lack of a male role model for the child, and stigmatization of the child (Small and Turksoy, 1985; Potter and Knaub, 1988; Leiblum et al., 1995). Despite these concerns, there has been relatively little research on the demographic and psychological characteristics of single DI recipients.

One study investigated single heterosexual women and lesbian couples as DI recipients (Leiblum et al., 1995). In that study the investigators found that the heterosexual single women were significantly older than their lesbian counterparts. These authors also reported that single heterosexual women were more concerned than lesbians about their limited reproductive time as it related to their decision to pursue DI. No differences between groups were found with respect to the subjects' concerns about financial security, employment and ambivalence about parenting. A second study compared single, married and lesbian DI recipients (Wendland et al., 1996). In that study, the authors reported that single women did not differ demographically from married or lesbian DI recipients. In addition, they found that single women told several family members and friends about the use of DI to conceive and also planned to tell the potential child of his or her DI origin. The authors concluded that single women are similar to married women, 'demographically, in DI outcome, and in many of the concerns and questions that face anyone having donor insemination' despite the fact that their sample of single women was small (n = 6).

These two studies have begun to address some issues of interest regarding the similarities and differences between differing groups of DI recipients but clearly more research is needed to describe the demographic and psychological characteristics of non-traditional DI recipients, e.g. single heterosexual women and lesbian women as they compare to the traditional heterosexual married recipient. The purpose of the present study was to compare a group of single DI recipients with a matched group of married recipients on psychiatric distress, self-esteem and attitudes about DI. We chose to compare the single women to married women because married women are the most common recipients of DI. As an initial attempt to discern if there were any differences between groups we selected two basic psychological constructs, psychiatric distress and self-esteem, as indices of general psychological functioning. These two variables are also theoretically relevant for their importance in reference to the successful adaptation to parenthood (Fedele et al., 1988). We postulated that there would be no differences between the two groups in terms of psychiatric distress and self esteem.
Regarding previous relationships and wishes for future relationships, single women were not explicitly asked their sexual preference but to be in the study and thus were not contacted again by the investigators. The available information about the seven non-participants did not return their questionnaires, therefore did not give their consent not to pursue treatment. The seven remaining non-participants decided to return the completed study questionnaire. Three women decided by family), information desired about the donor and attitudes about di resemblance, acceptance by self, acceptance by friends, acceptance by family), information desired about the donor and attitudes about disclose to others and to the child about the child’s DI origin. Concerns about the DI child were measured on a scale of 1 to 6 with 1 indicating ‘not at all’ concerned and 6 indicating ‘extremely’ concerned.

The data were coded and used in analyses (χ² and t-tests) to determine if there were any significant differences between groups.

Materials and methods

Subjects

Of 27 consecutive single women presenting to a university based infertility clinic for DI, 17 were recruited to participate in the study. The subjects were seen for a routine psychological consultation by the clinic’s psychologist. Following the interview the purpose of the study was explained and subject’s participation was requested. Those subjects who were willing to participate indicated their consent by returning the completed study questionnaire. Three women decided not to pursue treatment. The seven remaining non-participants did not return their questionnaires, therefore did not give their consent to be in the study and thus were not contacted again by the investigators. The available information about the seven non-participants indicated a mean age of 36.7 years, 71% (n = 5) were college graduates and 86% (n = 6) had professional occupations.

The subjects were also asked an open-ended question: ‘what factors did you consider prior to deciding about DI?’ The most commonly cited factors (in descending order) for single women were: the safety of the procedure, advancing age, DI being preferable to adoption, DI needed due to lack of partner, and DI being less expensive than adoption. For married women, the factors that were considered were (in descending order of frequency): no other way to get pregnant, preferable to adoption, age and biological connection of at

Table I. Demographic composition of the sample. Figures in parentheses are percentages

<table>
<thead>
<tr>
<th>Age</th>
<th>Married (n = 17)</th>
<th>Single (n = 17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school graduate</td>
<td>3 (17.6)</td>
<td>1 (5.9)</td>
</tr>
<tr>
<td>College graduate</td>
<td>11 (64.7)</td>
<td>13 (76.5)</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>3 (17.6)</td>
<td>3 (17.6)</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled labour</td>
<td>1 (5.9)</td>
<td>0</td>
</tr>
<tr>
<td>Managerial</td>
<td>1 (5.9)</td>
<td>0</td>
</tr>
<tr>
<td>Professional</td>
<td>11 (64.7)</td>
<td>15 (88.2)</td>
</tr>
<tr>
<td>Other</td>
<td>2 (11.7)</td>
<td>0</td>
</tr>
<tr>
<td>Full time parent</td>
<td>2 (11.7)</td>
<td>0</td>
</tr>
<tr>
<td>Income (US$)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10–30 000</td>
<td>0</td>
<td>2 (11.7)</td>
</tr>
<tr>
<td>30–50 000</td>
<td>2 (11.7)</td>
<td>8 (47.1)</td>
</tr>
<tr>
<td>50–70 000</td>
<td>5 (29.4)</td>
<td>4 (23.5)</td>
</tr>
<tr>
<td>70–90 000</td>
<td>6 (35.3)</td>
<td>3 (17.6)</td>
</tr>
<tr>
<td>&gt;90 000</td>
<td>4 (23.5)</td>
<td>0</td>
</tr>
<tr>
<td>Religious affiliation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catholic</td>
<td>7 (41.2)</td>
<td>9 (52.9)</td>
</tr>
<tr>
<td>Jewish</td>
<td>1 (5.9)</td>
<td>0</td>
</tr>
<tr>
<td>Protestant</td>
<td>8 (47.1)</td>
<td>3 (17.6)</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>2 (11.7)</td>
</tr>
<tr>
<td>Atheist/agnostic</td>
<td>1 (5.9)</td>
<td>3 (17.6)</td>
</tr>
</tbody>
</table>

*Significant difference between groups (χ² = 10.71, P < 0.03)

Results

The demographic description of the sample is provided in Table I to demonstrate that the attempt to match subjects on demographic variables was successful. The groups differed significantly only in their level of household income. As expected by virtue of their situation, more married than single women were in the upper (>70–90 000+) household income levels and more single than married women were in the lower income range ($10–50 000) (χ² = 10.71, P < 0.03).

In terms of general psychiatric distress, on the BSI the married women had a mean GSI score of 0.26 (± 0.20) and the single women had a mean GSI score of 0.26 (± 0.23). These scores are comparable to non-patient norms and indicate that the subjects in both groups reported low levels of psychiatric distress. On the SE the married women had a mean score of 15.8 (± 4.7) and single women had a mean score of 14.7 (± 3.7). These scores are in the normal range and there was no significant difference between groups.

The subjects were also asked an open-ended question: ‘what factors did you consider prior to deciding about DI?’ The most commonly cited factors (in descending order) for single women were: the safety of the procedure, advancing age, DI being preferable to adoption, DI needed due to lack of partner, and DI being less expensive than adoption. For married women, the factors that were considered were (in descending order of frequency): no other way to get pregnant, preferable to adoption, age and biological connection of at least one parent. In terms of the amount of time a subject took to decide to have DI, a significant difference was found.

Materials

Each subject completed the following questionnaires before undergoing her first insemination: (i) the Brief Symptom Inventory (BSI) (Derogatis and Melisaratos, 1983) is a 53 item, multiple choice scale that is an abbreviated version of the symptom checklist 90 (SCL-90). It assesses current psychiatric symptomatology including symptoms of depression and anxiety. The general severity index (GSI, total score/53) is considered the best indicator among the BSI scales of current level of psychiatric distress. Average GSI scores of 1.32 have been obtained among psychiatric outpatients and 0.30 among a sample of non-patients (Derogatis and Melisaratos, 1983); (ii) the Rosenberg self-esteem scale (SE) is a 10 item, multiple choice questionnaire that assesses self-esteem (Rosenberg, 1965). Total scores can range from 20–40 with higher scores indicating lower self-esteem. Scores over 23 may be indicative of clinically significant low self-esteem; (iii) the DI questionnaire contains 16 open-ended and multiple-choice items regarding the subjects’ attitudes and behaviour related to DI (Klock et al., 1994). Items include: time taken to decide to use DI, factors considered prior to deciding to use DI, previous counselling about DI, attitudes toward pre-DI psychological consultation, concerns about the DI child (medical/genetic, physical resemblance, personality resemblance, acceptance by self, acceptance by friends, acceptance by family), information desired about the donor and attitudes about disclosure to others and to the child about the child’s DI origin.

Concerns about the DI child were measured on a scale of 1 to 6 with 1 indicating ‘not at all’ concerned and 6 indicating ‘extremely’ concerned.

The data were coded and used in analyses (χ² and t-tests) to determine if there were any significant differences between groups.
between groups (Table II). Married women generally reported
taking less time to decide to use DI than did single women,
1–6 months compared with 6–24 months. There was no
difference between groups in reported preference of the gender
taking less time to decide to use DI than did single women,
believed that counselling by a mental health professional
in terms of psychological counselling, 94% of the subjects
a physician rather than a nurse to perform die insemination.
In terms of psychological counselling, 94% of the subjects
preferred a physician rather than a nurse to perform the insemination.
Subjects believed that counselling by a mental health professional
should be available to women considering DI.

When asked about their concerns about the future child,
both groups reported similar levels of concern regarding the
genetic and medical background of the child; the mean value
for married sample (Mm) was 5.7 ± 1.4 and the mean value
for the single sample (Ms) was 6.1 ± 1.2; physical resemblance
of the child (Mm = 4.3 ± 1.9, Ms = 4.2 ± 1.9); personality
resemblance of the child (Mm = 4.1 ± 1.6, Ms = 4.2 ± 1.7);
their own acceptance of the child (Mm = 1.6 ± 1.4, Ms =
1.4 ± 1.1); and their family’s acceptance of the child (Mm =
1.7 ± 1.5, Ms = 1.9 ± 1.3). There were no significant
differences between married and single women on any of these
items. When asked what information they would like to have
about the donor, in descending order of frequency, the responses
for single women were: appearance, personality, donor medical
history, ethnicity, intelligence and family medical history. For
married women the responses were: donor medical history,
appearance, personality, family medical history, ethnicity and
intelligence.

The subjects were also asked about their intentions and
behaviour regarding privacy and disclosure about the DI
treatment. In terms of telling the child, there was a significant
difference between married and single women with 29.4% of
married women indicating that they planned to tell the child
and 94.1% of the single women planning to tell the child
(\( \chi^2 = 16.1, P < 0.0003 \)). In all 59% of the married women
stated that they did not plan to tell the child and 11.7%
reported that they did not know whether they would tell the
child or not. Only one single woman reported that she was
unsure whether she would tell the child or not. There was
also a significant difference between the number of people
told about the DI. Married women reported telling an average
of 6.6 people and single women reported telling an average
of 17.5 people (\( t = 4.7, P < 0.03 \)). Therefore, it
appears as if marital status makes a significant difference in
terms of whether a child will know that he or she was
conceived via DI.

Discussion
The present study compared the psychological characteristics
of single and married women seeking DI. We matched consecutive
single women on the basis of age, education, occupation and
religion to married women to compare the psychological
characteristics of the two groups while controlling for any
systematic differences due to demographic status. We found
no significant differences between the two groups in reported
level of psychiatric symptomatology or level of self-esteem.
Both groups could be characterized as having low levels of
psychiatric distress and average levels of self-esteem. This
contradicts clinical lore that single women seeking DI are in
some way psychologically disturbed or troubled. Based on the
results of this study single women appear to have low average
levels of psychological distress and average levels of self
esteem and are not discernibly different from their married
counterparts.

In this study single women reported considering DI for a
longer period than married women. This is consistent with
findings from other studies suggesting that single mothers by
choice take their time making the decision to proceed and
have considered and rejected other avenues of conception as
unethical, untruthful, unsafe, and legally tenuous (McCarnet,
1985; Mechanick et al., 1988; Pakizegi, 1990). In this study
single women considered several factors prior to beginning
DI, including the safety of the procedure, their advancing age,
and the preference of DI over adoption. The process of deciding
to have a child via DI for the single woman may take years
as she acknowledges that she may not develop an enduring
relationship, that her reproductive years are limited and as she
prepares for the financial and other responsibilities of being
the sole parent. Alternatively, married couples may take less
time to decide about DI because they have already decided
that they want to have a child. They may have used the time
during the infertility work-up to consider other family building
options, then when the male infertility is diagnosed, they
proceed to DI. This is consistent with the reports of married
women in this study whose most common consideration prior
to DI was ‘no other way’ to get pregnant given their husbands’
infertility. Both married and single women reported that DI
was preferable to adoption.

In terms of the concerns that potential mothers had for their
DI offspring, we found no significant differences between
groups, with both married and single women reporting that
their greatest concern was the medical and genetic background
of the child. Other concerns, in order of descending importance,
were the physical resemblance of the child, the personality
resemblance of the child, the woman’s acceptance of the child
and their family’s acceptance of the child. These findings are
the same as those from a retrospective study of DI parents
(Klock and Maier, 1991). Therefore, it appears that single
women are no different than married women in their concerns
for their potential offspring and that neither group is different
from parents who have had a child via DI. Related to these
concerns were the similarities between the two groups about
the information they wished to have about the donor. Both
married and single women wanted more information about the
donor’s appearance, medical history and personality.
Lastly, we asked subjects what their intentions were regarding telling the child that he or she was conceived with donor spermatozoa. We also asked subjects how many people they had told about using DI to conceive. We found that significantly more single women than married women planned to tell the child that it was conceived via DI. Only one single woman reported that she was unsure of whether she would tell, all other single women stated that they planned to tell the child. Anecdotally, most single women reported that they felt that the child had a right to know about its DI origin. In addition to disclosing to the child, the single women also reported telling more people about using DI to conceive. In fact, single women told almost three times as many people as married women about planning to use DI to conceive.

On the other hand, only 29% of the married women planned to tell the child, 59% planned not to tell and 12% were unsure whether they would tell or not. In addition, married women told many fewer people that they planned to conceive via DI. This is not surprising because if married women do not plan to tell the child, then it would be unlikely that they would tell others, for fear that the child would find out about its DI origin from someone else. It may be that single women feel more comfortable disclosing to the child and others about the use of DI to conceive because of their belief that DI was the most acceptable individual and societal option for single parenting. For married men and indirectly for married women, DI may not be as accepted an option because of the traditional shame associated with male infertility. The married women may also have less freedom in decision-making about telling the child and others due to consideration of the husband’s feelings regarding disclosure. In the married couple, the husband may feel that he cannot tell in order to protect his self-esteem regarding his infertility and to protect the father-child bond. Based on these findings, we agree with Broderick and Walker (1995) who concluded that a uniform recommendation to recipients about disclosure to their child(ren) is not supported by research findings.

In summary, the results of this study suggest that there are very few psychological differences between single and married women who are seeking DI treatment. Concerns about the appropriateness of single women as candidates for DI do not appear to be justified. The women in this study seeking DI have given DI considerable thought and are intentionally trying to get pregnant. In addition, they are older, highly educated, professional women who are financially secure. These women are similar psychologically to married women seeking DI except that they plan to tell the child about its DI origin and have told other people about using DI to conceive. This greater emphasis on disclosure for single women may be based on the freedom not to have to conceal male infertility and may reflect the single woman’s belief that having a child via DI is the most individually and socially acceptable option for becoming a parent. Further research is needed with larger samples, and longitudinal follow-up to determine if any differences emerge between the two groups over the course of pregnancy and the transition to parenthood.

References

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