Open-identity donor insemination in the United States: is it on the rise?

Information about US donor insemination programs was reviewed to determine whether an increasing number are offering open-identity donation. Results indicate that indeed, numbers are rising and that the ratio of open-identity to anonymous sperm donors in a program increases the longer that the program has offered an open-identity option. (Fertil Steril® 2007;88:231–2. ©2007 by American Society for Reproductive Medicine.)

An Internet search today suggests that a considerable number of donor insemination (DI) programs now offer open-identity sperm donation. In contrast to traditional anonymous donors, open-identity donors agree to release their identifying information to adult offspring. Internationally, a number of countries recently have legislated that DI programs abolish anonymous donation and instead have open-identity sperm donors only (e.g., the United Kingdom and Norway in 2005 and the Netherlands in 2004; this legislation also applies to other forms of gamete donation). The United States has no legislation concerning gamete donation, but several DI programs now have both anonymous and open-identity donors for recipients to choose from or are entirely open-identity donation. To address whether open-identity donation is on the rise in the United States, we reviewed information about US DI programs to determine the number offering open-identity donation. Among programs in existence for $\geq$10 years, we then statistically tested whether the number of open-identity DI programs had increased during this time period.

In this study sample, we included US DI programs that recruit their own sperm donors (this included commercial and nonprofit sperm banks, DI programs within fertility centers, and stand-alone DI programs). These programs could also use donors from other programs, but our criterion was that at least some of their donors were recruited on site.

In the United States, no licensing body requires that DI providers be registered in a central database. Thus, we used multiple sources to identify programs for study inclusion. Our four main sources included the American Association of Tissue Banks' list of accredited DI programs, fertileHOPE's list of DI programs (fertileHOPE is a nonprofit organization that helps cancer patients preserve their fertility), and two Websites, spermcenter.com (a commercial Website developed by a DI recipient to allow recipients to compare sperm bank services) and fertilityplus.org (a nonprofit Website developed by patients for patients trying to conceive). By including both commercial and recipient-driven sources as well as an accreditation organization, we aimed to compile as comprehensive a list of DI programs as possible. We also reviewed lists of DI programs in books oriented toward single women (1) and lesbians (2), but these were redundant with our other sources.

The final sample included 31 DI programs. There are many more programs in the United States that were not included because they did not recruit their own donors but instead bought sperm from one or more of the programs in our sample. Several of the programs included in the sample had more than one site. If they had only one catalog for all sites, they were counted as one program, whereas programs with multiple sites and multiple catalogs were counted as more than one program.

We obtained the following information for each program: number of donors in the program's catalog; how long the program has existed; and when applicable, the proportion of the donors who were open-identity, the definition of open-identity, and how long the program has offered open-identity donation. This information was obtained from each program's Website; from direct contact with the program by phone; and/or at the American Society for Reproductive Medicine's 2005 annual meeting, from a program's representative. No programs declined to participate in the study. Because this study used information about the programs that was publicly available, institutional review board approval was not required.

To test whether an increasing number of programs are offering open-identity donors, we identified programs that had existed for $\geq$10 years. Only 3 of the 31 programs did not qualify, leaving a sample size of 28. For a program to have open-identity donors, the donors had to be willing to be identified to offspring at or before the offspring reached age 18 years and/or to have at least one meeting with the offspring. Thus offspring were guaranteed to be able to get additional information about their donors at some point, should they want it. The donors had to agree to this at the time of donation. A few programs had donors who were willing to be asked in the future whether they wanted to reveal their identity, if an adult offspring should request it. However this did not qualify as open-identity donation, because these donors retained the right to refuse identity release.

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We compared the number of DI programs with open-identity sperm donors in 1996 to the number in 2006. In 1996, 3 (10.7%) of the 28 programs had open-identity donors. In 2006, about three times as many (nine; 32.1%) had open-identity sperm donors. These numbers were significantly different [$\chi^2(1) = 13.44$, $P<.001$], suggesting that the number of open-identity DI programs is increasing.

As countries move toward legislating open-identity only programs, there is usually concern that the numbers of donors will drop and that the availability of DI thus will be threatened (e.g., Daniels et al. [3] and Paul et al. [4]). It is possible, however, that whereas numbers will drop (e.g., Daniels and Lalos [5]), they will increase again as donor recruitment strategies change at the programs (see also Novaes [6]). For example, as programs move from strategies focused on monetary compensation to a focus on the altruistic and helping component of DI, a different set of men will be recruited, from different sources than before (e.g., community volunteer organizations as opposed to college campuses). This change takes time. Thus, we tested whether there was a relationship between the number of years that a program has offered open-identity donation and the proportion of open-identity donors in their catalog.

For this analysis, we dropped one program that had started recruiting open-identity donors but did not yet have them in its catalog. Among the eight programs with open-identity donors, age of the program and proportion of open-identity donor in the catalog were strongly related [$r(6) = .731$, $P<.05$; Fig. 1].

One program was open-identity only (i.e., it had no anonymous donors). If this program was excluded from the analysis, the relationship was even stronger [$r(5) = .936$, $P<.01$].

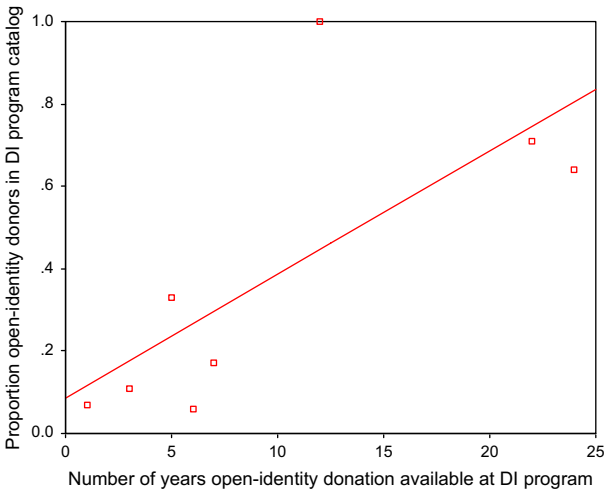
These results suggest that in the United States, the number of open-identity DI programs is increasing. In addition, it appears that the ratio of open-identity to anonymous donors at a program increases the longer that a program has offered open-identity donation. This finding may be encouraging to countries that recently have legislated open-identity only gamete-donation programs and are experiencing a shortage of donors.

One limitation of this study was that we could not identify a sample of programs that existed in 1996 and that no longer exist. It is possible that open-identity programs existed but failed to thrive. However, we know of no such programs.

In the United States, the increase in open-identity programs suggests that the industry is in a time of change, with more and more DI programs recognizing that the option to access a donor's identity is important. It has yet to be empirically tested whether this reflects a change among prospective DI parents' attitude toward sharing donor information with their child and wanting options for them. It is also unclear whether this is true among heterosexual couples who can be deterred from disclosure by feelings of stigma around male infertility. However, single women and lesbians almost always are open about their use of DI and consequently may want the option of open-identity donation for their children. As their numbers increase among DI users, the demand for open-identity programs also will increase. This is likely to be the primary driving force behind the current increase in open-identity programs that we are experiencing in the United States.

FIGURE 1

Relationship between the number of years that a DI program has had open-identity donors and the proportion of open-identity donors in its catalog.



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