

**An attitude survey of male infertile patients
with artificial insemination by donor**

Hyun Jun Park, Nam Cheol Park

*Department of Urology, College of Medicine,
Pusan National University, Busan, Korea*

Objectives: In determining to perform non-spousal artificial insemination by donor (AID) to an infertile married couple, infertile couple requires not only the thorough understanding of the medical procedure but also scrutinizing the effect, which it will have on the relationship of the family including the baby to be born itself.

Materials and methods: 148 cases with non-curable male infertility were enrolled in this inquiry survey. The donor insemination questionnaire consists of 18-items which are assessing subjects' clinical properties, the background for AID practice, psychological traits, and long term influence.

Results: Of the survey, 49 cases were returned (33.1%) and 10 cases (20.4%) of these gave birth after AID practice. The mean age of husbands and wives of the 49 cases were 34.6 ± 4.2 and 32.1 ± 3.0 years old, respectively and the duration of marriage was 5 years and 4 months. In about half of the cases, AID was first suggested by husband and the decision was made by only the couple. The major reason for the operation was to form a complete family. In the item of the psychological effects, two-third of the couples felt anxiety related to the procedure which are mostly about the possible congenital or acquired deformity of baby. The AID was positively suggested in overall by all of recipients. After giving birth to a child, most couples felt positive about their decision. As a child grows up, about half of the couples felt the child as their own and expected not to tell of the AID. In overall, about 50% of couples presented satisfaction with the procedure.

Conclusions: As the above results, various psychological impacts including anxiety about a child-to-be-born were accompanied to those who were recommended of AID. To overcome these problems, sufficient medical information and consultation about the course of selecting the donor and the whole procedures of AID should be provided beforehand.

Key Words: Artificial insemination, Donor, Male infertility

(artificial insemination by do-
nor, AID)

: ,) 602-739 171 10 ,
Tel: (051) 240-7349, Fax: (051) 247-5443, e-mail: pnc@pusan.ac.kr

가 AID가

.¹ AID 1960 1993

가

1992 2

5

2

1997 11 2003 8 5 10

1993 5

AID

49

49 가 2000 8

AID 가 14

가 (28.6%)

35 (71.4%)

1) (

가 Guidelines for Gamate and Em- bryo Donation⁴), 2) AID

(

), 3) AID (

1997 4

), 4) AID (

AID

AID), 5) AID

가 (

) 5 18

가

가

가

1. AID (Table)

34.6±

4.2 32.1±3.0

가 30-34 가 23 (48.9%) 33 (71.7%) 가

5 4

49 10 (20.4%) AID 13

가

2.25:1

가

AID

2. AID

AID (n=44,)

가 18 (40.9%) 가

Table. Clinical profile of 49 participants

Variables	Value
Age of total sample (years)	33.3±3.8 (28 - 46)
Men	34.6±4.2 (28 - 46)
Women	32.1±3.0 (28 - 43)
Age distribution of total sample (years)	
Men	
<30	4 (8.5%)
30-34	23 (48.9%)
35-39	13 (27.7%)
≥40	7 (14.9%)
Women	
<30	7 (15.2%)
30-34	33 (71.7%)
35-39	5 (10.9%)
≥40	1 (2.2%)
Duration of marriage (years)	5.4±3.5 (0.5 - 18.0)
No. of children (%)	
None	39 (79.6%)
One	7 (14.3%)
Two	3 (6.1%)

, 17 (38.6%), TV, 6 (13.6%), 가 4 (9.1%), 2 (4.5%), AID 1 (2.3%) . , , TV, 가 25 (56.8%) 가 . AID (n=47) 26 (55.3%) 가 16 (34.0%), 가 5 (10.6%) . AID (n=47) 가 30 (63.8%) 가 , 8 (17.0%), 가 , 가 3 (6.4%), 2 (4.3%), , 1

(2.1%) 가 AID 가 . AID (n=47,) 가 41 (87.2%) 가 , 가 25 (53.2%), 20 (42.6%), 18 (38.3%), 13 (27.7%), 11 (23.4%) .

3. AID

(n=46) 가 22 (47.8%) 가 11 (23.9%), 10 (21.7%), 3 (6.5%) . AID (n=43) 30 (69.8%)가 (n=40,) 가 30 (75.0%) 가 27 (67.5%), 가 26 (65.0%), 24 (60.0%), 21 (52.5%), 17 (42.5%), 16 (40.0%), 15 (37.5%) . (n=47) 29 (61.7%)가 가 17 (36.2%), 1 (2.1%)

4. AID

AID (n=18) 8 (44.4%) 가 2 (11.2%) . AID (n=13,) 가 7 (53.8%) 가 4 (30.8%), 3 (23.1%) . (n=15) 10 (66.7%) 가 4 (26.7%), 1

(11.1%)

AID

(70.6%) (n=17) 12
5 (29.4%)

(n=17,) 가 AID 가
11 (64.7%),
8 (47.1%), 7 (41.2%),

4 (23.5%), 3 (17.6%)
(n=5,)
3 (60.0%) 가
2 (40.0%), 가 1 (20.0%) 1992

(n=14,)
가 9 (64.3%) 가 5
4 (28.6%) AID가

3 (21.4%), 가 2 (14.3%),
1 (7.1%) 1993 5

AID (n=26)
11 (42.3%), 가 AID
8 (30.8%) 가

5 (19.2%), 가 10
가 1 (3.8%)

5. AID

AID 가 (n=20)
가 8

(40.0%), 3 (15.0%), 1
(5.0%) AID AID가

(n=26) AID 가 AID가
AID가

AID AID (n=22) 가
가 12 (54.5%),

6 (27.3%), 3
(13.6%), 1 (4.5%) 13.7% (14/102)

79.1% (34/43)

Klock ⁹ AID

Manuel ²²

AID
가

AID

AID
가
가 30 34
가 2/3

Nachtigall ¹

AID
가

Wright ²³

AID

AID

40 2/3

가 35 (87.5%)

AID

Bolton ²⁴ AID

가

, Klock ²¹

Karow ¹⁰ AID

AID

AID

Klock ²¹ 가

AID

가

가

2/3 가

Hoy ²³ AID
가
Marion

3.6% 3.2%

AID

가 2.25 2.3% 1.7%

25

11-3

Virro ²⁶

AID

, Klock ²¹

AID

가

AID

14-6

가

17,18

가

19,20

AID

1

Nachtigall

AID

Maier ²¹

가

27-9 AID

가

가

2.2%³⁰ 7.2%³¹ 가

AID
(54%) 가 AID
33 AID
70% AID
AID
AID
11% 가 AID
가 AID
AID가
AID
AID가

1. Nachtigall, RD, Tschann JM, Quiroga SS, Pitcher L, Becker G. Related Stigma, disclosure, and family functioning among parents of children conceived through donor insemination *Fertil Steril* 1997; 68: 83-9

2. Amuzu ³² ³¹ . 1999
3. Schover : 1996 . 2002; 45:1700-17
4. Curie-Cohen M, Luttrell L, Shapiro S. Current practice of artificial insemination by donor in the United States. *N Engl J Med* 1979; 300: 585-90
5. U.S. Congress. Office of Technology Assessment. Artificial insemination practice in the United States: Summary of a 1987 OTA 38-BA-48 Washington, D.C.: U.S. Government Printing Office 1988
6. Critser, JK. Current status of semen banking in the U.S.A. *Hum Reprod* 1998;13(Suppl.2): 55-67, discussion 68-9
7. Human Fertilisation and Embryology Authority 3rd Annual Reports. Human Fertilisation and Embryology Authority; 1994
8. Hennebicq S, Thepot F. Bilan 199 des CECOS. *Report Hum Horm* 2000; 13: 465-9
9. Klock SC, Maier D. Psychological factors related to donor insemination. *Fertil Steril* 1991; 56: 489-95
10. Armand M, Karow. Family Secret: Who is to know about AID? *N Engl J Med* 1982; 306: 372-7
11. Mochimaru F. Artificial insemination with frozen donor semen: its current status and follow-up studies. *Keio J Med* 1979; 28: 33-48
12. Weller J. Schwangerschafts und geburtsverlauf nach 104 erfolgreichen artifiziiellen donogene: Insemination (ADI) mit Nativ-un Kryosperma. *Geburtsh u Frauenheilk* 1980; 40: 269-75
13. Katzorke T, Propping D, Tauber-peter F. Results of donor artificial insemination (AID) in 415 couples. *Int J Fertil* 1981; 26: 260-6
14. Aiman J. Factors affecting the success of donor insemination. *Fertil Steril* 1982; 37: 94-9
15. Chong AP, Taymor ML. Sixteen year's experience with therapeutic donor insemination. *Fertil Steril* 1975; 26: 791-5
16. Newill R. AID-A review of 200 cases. *BJU* 1976; 48: 139-44

17. Harlap S. Gender of infants conceived on different days of the menstrual cycle. *N Engl J Med* 1979; 300: 1445-8
18. Virro MR, Shewchuk AB. Pregnancy outcome in 242 conceptions after artificial insemination with donor sperm and effects of maternal age on the prognosis for successful pregnancy. *Am J Obstet Gynecol* 1984; 148: 518-24
19. Adashi EY, Rock JA, Sapp KC. Gestational outcome of clomiphene related conception. *Fertil Steril* 1979; 31: 620-6
20. James WJ. Artificial insemination by donor: a review of 12 year's experience: a comment. *J Biosoc Sci* 1984; 16: 153-4
21. Klock SC, Jacob MC, Maier D. A prospective study of donor insemination recipients: secrecy, privacy, and disclosure. *Fertil Steril* 1994; 62: 477-84
22. Manuel C, Chevert M, Czyba J. Handling of secrecy by AID couples. In *Human Artificial Insemination and Semen Preservation*, Edited by G David, W Price. New York, Plenum Press 1980: 419-21
23. Wright J, Duchesne C, Sabourin S, Bissonnette F, Benoit J, Girard Y. Psychologic distress and infertility: men and women respond differently. *Fertil Steril* 1997; 55: 100-8
24. Bolton V, Golombok S, Cook R, Bish A, Rust J. A comparative study of attitudes towards donor insemination and egg donation in recipients, potential donors and the public. *J Psychosom Obstet Gynecol* 1991; 12: 217-28
25. Verp MS, Cohen MR, Simpson JL. Necessity of formal genetic screening in artificial insemination by donor. *Obstet Gynecol* 1983; 62: 474-9
26. Virro MR, Shewchuk AB. Pregnancy outcome in 242 conceptions after artificial insemination with donor sperm and effects of maternal age on the prognosis for successful pregnancy. *Am J Obstet Gynecol* 1984; 148: 518-24
27. Claytom CE, Kouacs GT. AID: a pretreatment social assessment. *Aust N Z J Obstet Gynaecol* 1980; 20: 208-10
28. Adamson D. Clinical management of psychological issues in therapeutic donor insemination. Presented at the 22nd annual Postgraduate Course of The American Fertility Society. San Francisco, California, 1989; 53
29. Stewart C, Daniels K, Boulnois J. The development of a psychosocial approach to artificial insemination of donor sperm. *N Z Med J* 1982; 95: 853-6
30. Bendvold E, Moe N, Skjaeraasen J. Social conditions of children born after artificial insemination by donor. *Scand J Soc Med* 1990; 18: 203-6
31. Amuzu B, Laxova R, Shapiro SS. Pregnancy outcome, health of children, and family adjustment after donor insemination. *Obstet Gynecol* 1990; 75: 899-905
32. Lansac J, Royere D. Follow-up studies of children born after frozen sperm donation. *Hum Reprod Update* 2001; 7: 33-7
33. Schover LR, Collins RL, Richards S. Psychological aspects of donor insemination: evaluation and follow-up of recipient couples. *Fertil Steril* 1992; 57: 583-90
34. Farris EJ, Garrison M Jr. Emotional impact of successful donor insemination: a report on 38 couples. *Obstet Gynecol* 1954; 3: 19-20
35. David A, Avidan D. Artificial insemination donor: clinical and psychologic aspects. *Fertil Steril* 1976; 27: 528-32

()

Serial No. _____, Chart No. _____ Name: _____ Age: _____

1.

? _____ , ? _____

? _____

?

_____ , _____

2.

?

()

3.

가

가?

가

()

4.

?

5.

?

1)

2)

(가)

,

,

,

()

10.

?

“ ”

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

()

11.

?

12.

?

13.

가

?

(가)

A.“ ”

가“

B.“ ”

- 가
()
14. 가 ?(가)
가
가
가
15. .()
가 ?
가
16. 가
가
가
17. (,) ?
?
18. ?