EDITORIAL

Assessing Outcome¹

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In this issue of this Journal, Deonandan *et al.* point out the limitations of life-table analyses in the evaluation of infertility treatment outcomes (1). And, while one can continue to argue about the best statistical methodologies applied when assessing IVF outcome versus outcome of other fertility treatments, this paper should remind us that the average infertile couple probably does not care very much what a program's specific success rates for any particular treatment are. In fact, if patients do care about these kind of statistical data, then they should be advised that they are barking up the wrong tree!

We all know and accept by now that outcome data for fertility treatments are greatly biased by patient selection and that women with poorer ovarian reserves have poorer pregnancy chances with IVF. Selection bias is, however, even further aggravated since some centers treat women with excellent ovarian function immediately with IVF, while others enter only those who have failed a number of ovarian stimulation cycles (often accompanied by intrauterine inseminations). Of course, the former can expect to have higher pregnancy rates than the latter and this kind of selection bias cannot be as easily controlled for as age-related selection biases.

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Simply stated, there is no way to compare IVF outcomes between programs, unless we use supercomputers with discriminant analyses, based on innumerable patient variables. But is there really a need for such a comparison?

In my opinion, there isn't! Infertility patients do not appear interested in outcome statistics based on individual treatment steps. What they really want to know when seeing a fertility specialist is, "What are my chances to conceive in this program?" "How long will it take?" and "What will it cost?"

Which brings me back to the paper by Deonadau *et al.* (1). Life-table analyses could represent an entirely acceptable methodology to, in fact, compare the performance of infertility programs as long as such statistical methodology not only is utilized to determine treatment-specific outcomes but evaluates program-specific pregnancy rates, independent of the treatment options chosen. The real questions that should be asked in comparing infertility programs should therefore be: What are a specific couple's chances to conceive at *this* fertility center (independent of the treatments utilized)? What are the chances to deliver a healthy child? And how long will it take, and at what cost?

These questions could be easily answered by establishing age-based life tables for individual programs and by comparing those between infertility centers with regard to pregnancy outcome and the respective cost a life birth generates.

¹ The opinions expressed in this Editorial are the author's and do not necessarily represent the opinion of the Editorial Board or the publisher.

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Cost is an important factor because of the obvious incentive to increase pregnancy rates at the expense of very costly multiple births (2) but also because there are high cost differences between programs and their respective commitments to cost management.

The treatment of infertility lends itself better than most other areas in medicine to quality, outcome, and cost controls. It seems surprising that we have done so little so far.

REFERENCES

1. Deonandan R, Campbell MK, Ostbye T, Tyummon I, Robertson J: IVF births and pregnancies: An exploration of two methods of assessment using life-table analysis. *J Assist Reprod Genet* 2001;18
2. Gleicher N, Oleske D, Tur-Kaspa I, Vidali A, Karande V: Reducing the risk of high-order multiple pregnancy after ovarian stimulation with gonadotropins. *N Engl J Med* 2000;343: 2-7