

Selling ART: An Empirical Assessment of Advertising on Fertility Clinics' Websites

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Scholarship on assisted reproductive technologies (ART) has emphasized the commercial nature of the interaction between fertility patients and their physicians, but little attention has been paid to precisely how clinics persuade patients to choose their clinics over their competitors'. This Article offers evidence about how clinics sell ART based on clinics' advertising on their websites. To assess clinics' marketing efforts, I coded advertising information on 372 fertility clinics' websites. The results from the study confirm some suspicions of prior ART scholarship while contradicting others. For instance, in line with scholars who are concerned that racial minorities face barriers to accessing ART, I found that 97.28% of the websites that contain pictures of babies have pictures of white babies, and 62.93% have pictures of only white babies. Similarly, in agreement with prior work that challenges the effectiveness of self-regulation, I found low levels of compliance with industry-sponsored advertising regulations. Contrary to the assumption held almost universally in the literature on ART, however, I found that clinics do not prioritize advertising their success rates. Clinics' websites are more likely to emphasize several other attributes of care instead of their success rates. In light of the new data uncovered by this study, I conclude by offering new regulatory directions for policymakers to consider as they try to keep up with changes in the fertility business.

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INTRODUCTION

As many people have pointed out, the practice of assisted reproductive technologies (ART) is big business.¹ The fertility industry generates in excess of \$4 billion in gross revenues each year,² and to generate that revenue, fertility clinics actively market their services in an attempt to gain market share.³ Many people pay for ART out of pocket, and these services are expensive, such as in vitro fertilization (IVF), which costs an average of approximately \$12,317.⁴ Clinics have significant incentives to attract business.

This Article offers an empirical assessment of the advertising found on fertility clinics' websites. Websites are an important source of information about fertility clinics for patients considering ART. As far back as 2000, a study found that "a considerable proportion of patients from all socioeconomic levels is currently using the WWW with regard to their fertility problems."⁵ In 2010, 77% of people in North America were Internet users.⁶ Online advertising has been an important factor in helping some countries become destinations for Americans seeking ART.⁷

1. *E.g.*, DEBORA L. SPAR, *THE BABY BUSINESS: HOW MONEY, SCIENCE, AND POLITICS DRIVE THE COMMERCE OF CONCEPTION* (2006).

2. THE PRESIDENT'S COUNCIL ON BIOETHICS, *REPRODUCTION & RESPONSIBILITY: THE REGULATION OF NEW BIOTECHNOLOGIES* 153 (2004), available at <http://www11.georgetown.edu/research/nrcbl/pcbe/reports/reproductionandresponsibility/index.html> ("Assisted reproduction is a growing economic enterprise, with gross revenues of \$4 billion per year . . .").

3. See Kimberly D. Krawiec, *Altruism and Intermediation in the Market for Babies*, 66 WASH. & LEE L. REV. 203, 213–14 (2009) ("[P]rofits are undeniably a—if not *the*—motivating factor in the industry as well. Although many fertility centers are affiliated with nonprofit hospitals or academic institutions, the fertility center itself is often a professionally managed, for-profit, private corporation. Those fertility centers not affiliated with academic institutions are even more openly profit-centered and, like suppliers in any competitive industry, they engage in elaborate marketing efforts to attract customers. These efforts include hiring high-priced marketing consultants; advertising on billboards, the radio, newspapers, and magazines; and assiduously courting physician referrals by 'wining and dining' doctors and hosting dinners and parties at medical meetings." (emphasis in original) (footnote omitted)).

4. See *infra* Part II.D.1.

5. Ariel Weissman, Lynda Gotlieb, Susan Ward, Ellen Greenblatt & Robert F. Casper, *Use of the Internet by Infertile Couples*, 73 FERTILITY & STERILITY 1179, 1182 (2000).

6. Kenan Omurtag, Patricia T. Jimenez, Valerie Ratts, Randall Odem & Amber R. Cooper, *The ART of Social Networking: How SART Member Clinics Are Connecting with Patients Online*, 97 FERTILITY & STERILITY 88, 88 (2012).

7. J. Brad Reich & Dawn Swink, *You Can't Put the Genie Back in the Bottle: Potential Rights and Obligations of Egg Donors in the Cyberprocreation Era*, 20 ALB. L.J. SCI. & TECH. 1, 21–22 (2010) ("An estimated 150,000 medical tourists visited India in 2005 and that number increased to 450,000 by 2008. Perhaps more telling is that India's RT [reproductive technology] segment of medical tourism was approximately \$ 450 million per year in 2006, but projected to grow to six billion dollars by 2008. A significant portion of this growth is attributable to the Internet and, specifically, to user-friendly websites and effective, although not necessarily reliable, online advertising." (footnotes omitted)); Ruby L. Lee, Note, *New Trends in Global Outsourcing of Commercial Surrogacy: A Call for Regulation*, 20 HASTINGS WOMEN'S L.J. 275, 276–77, 284 (2009) ("Surrogacy agencies in Russia and Slovenia also seek to tap into the market of outsourcing commercial surrogacy by advertising on the Internet and highlighting the more favorable treatment towards surrogacy

Fertility websites differ significantly in their style and content, but most have Home pages with vibrant colors, large pictures of happy babies and doctors, and information about the clinic.⁸ More extensive information about the clinic can often be found on an About page that offers details about the physicians' backgrounds, the clinic's location, and the clinic's laboratory.⁹ In addition to a link to an About page, the Home pages usually have links to a large number of other pages that contain information about becoming a patient, the types of fertility treatments that the clinic offers, financing treatments, and other patient education resources.

To provide an in-depth analysis of the content of clinics' websites, several research assistants and I looked at every fertility clinic in the United States that is a member of the Society for Assisted Reproductive Technology (SART), a professional organization that represents the vast majority of fertility of clinics in the United States.¹⁰ We coded the content of these websites, recording sixty different points of data for each website. Part II of the Article provides details about the methodology we followed.

The study has three goals. First, it offers information about what features of clinics are advertised most frequently. How often clinics present information on specific topics provides insight into what the clinics think patients value in their fertility treatment provider. It also reveals potential for subtle misrepresentations by showing how clinics frame their services. Part III presents findings on this topic. The most surprising finding from this part of the study was that success rates, which have received the most academic and regulatory attention, were not the most common attribute that clinics advertised. Instead, several other parts of the fertility transaction received greater emphasis. Also, notably, a large number of clinics used advertising strategies that relied on emotional responses instead of intellectual responses to information. A high percentage of clinics post pictures of babies on their Home page, and a significant number use words like "dream" and "miracle."

In describing the information on how clinics market their services on their websites in Part III, I approach the fertility business as a market in which patients make choices as consumers. Thus, one aim of the Article is to understand how law can help patients as consumers make the best decisions to maximize their welfare. While it may be difficult to classify people seeking fertility treatments as patients or consumers because they operate as both, the consumer element of the interaction between clinics and patients is important because patients are free to pick their treatment provider.¹¹ To the extent that the law can help those choices best reflect consumers' preferences, I argue it should.

The second goal of the study is to understand barriers to access to ART faced by racial minorities. The content of clinics' websites offers insight both into how

that their countries provide—*vis a vis* little or no regulation of commercial surrogacy.”).

8. *E.g.*, *Welcome to Brigham and Women's Hospital: Center for Infertility and Reproductive Surgery*, BRIGHAM AND WOMEN'S HOSPITAL, <http://infertility.brighamandwomens.org/index.php>.

9. *E.g.*, *About Our NY Fertility Clinic*, NEW YORK FERTILITY CLINIC, <http://www.fertilitynewyork.com/fertility-specialist.php>.

10. Society for Assisted Reproductive Technology, *About Us: What Is SART?*, SART.COM, <http://www.sart.org/detail.aspx?id=1864>.

11. *See* Naomi Cahn, *The New Kinship*, 100 GEO. L.J. 367, 372 (2012) (“ART is focused on patients, and on finding treatments for them in a medicalized, consumer-based model.”).

potential patients in these groups view fertility care, but it also has the potential to uncover unstated values held by the clinics that created the websites. Part IV discusses the data relating to access to ART, finding, for instance, that almost every clinic's website that has an image of a baby on it has an image of a white baby.

Part V discusses the third goal of the study—assessing the success of the industry's attempts at self-regulation in advertising. The American Society for Reproductive Medicine (ASRM) is a “multidisciplinary organization dedicated to the advancement of the art, science, and practice of reproductive medicine” that is affiliated with SART.¹² For the past thirteen years, ASRM has created advertising guidelines that it requires its members to follow. Despite the guidelines being mandatory for members, Part V discusses how a large number of ASRM member clinics are not complying with the guidelines. Studies of fertility clinics have repeatedly found that clinics do not comply with self-regulation, but members of the fertility business and academic commentary continue to insist that self-regulation, and not legal intervention, offers the best hope for ensuring clinics meet minimal standards. Part V describes how in the context of advertising, self-regulation has utterly failed. As just one example, almost 40% of clinics did not state the method the clinic used for calculating its success rate. If self-regulation fails in this context where compliance can easily be assessed, it casts doubt on the sufficiency of self-regulation in this industry more generally.

In light of the evidence uncovered in the study, I conclude by offering new directions for policymakers and the industry to consider as they continue to try to keep pace with new developments in the field of ART. Because of the problems associated with self-regulation in the field, I suggest that lawmakers should consider bolstering consumer protection measures to ensure that clinics advertise truthfully. But, for some existing practices, legal solutions are inapt, so I suggest regulations the industry could consider requiring its members to follow.

I. METHODOLOGY

To assess fertility clinic websites, three research assistants and I engaged in a summative content analysis of the websites by making qualitative interpretations of the material presented and quantitative counts of the coded information.¹³ I identified which clinics to include in the study by using the Society for Assisted Reproductive Technology (SART) website which lists its members by state.¹⁴ The SART listing contains most clinics' website addresses, but for those that did not list a website, we obtained the website addresses by using standard Internet search engines or by calling the clinics directly.

12. American Society for Reproductive Medicine, *About Us: Mission Statement*, ASRM.ORG, <http://www.asrm.org/mission/>.

13. This approach mirrors prior work. See, e.g., Jack Y.J. Huang, Federico Discepolo, Haya Al-Fozan & Togas Tulandi, *Quality of Fertility Clinic Websites*, 83 FERTILITY & STERILITY 538, 539 (2005); Katherine M. Johnson, *Excluding Lesbian and Single Women? An Analysis of U.S. Fertility Clinic Websites*, 35 WOMEN'S STUD. INT'L F. 394 (2012).

14. Society for Assisted Reproductive Technology, *IVF Success Rates: National Summary*, SART.ORG, http://www.sart.org/find_frm.html.

Using SART's listing, we reviewed information for 381 clinics. Of those 381, only nine clinics did not have websites, meaning 97.64% (n=372) of fertility clinics belonging to SART currently have websites. The number of clinics with websites has continued to increase. In 2005, 66% of clinics had websites; in 2007, 80% had websites; and another study from 2012 found 96% had websites.¹⁵

I developed a detailed protocol that asked team members to input codes and textual material from the websites into an Excel spreadsheet. I decided which things to code based on a review of the literature surrounding ART, which revealed the concerns past work has raised about clinic behavior, and a pilot study, which coded some of the information we obtained on hundreds of websites several years ago and suggested additional items to evaluate. To ensure we all approached the study in the same way, I trained each research assistant how to follow the protocol, I coded one website with the assistant to practice, I answered all questions about coding by group emails, and I reviewed the completed spreadsheet to identify any aberrations.

For most topics, the research team member looked at the Home page of the clinic's website and the About page (or its equivalent) on the website and answered yes/no questions about whether specific marketing information was present on the website. If the marketing information was present, the researcher cut and pasted specific quotations from the website that contained the marketing information. We counted any statement as advertising, whether it appeared to be purely informational or persuasive in nature, because even physicians working in fertility clinics recognize that clinics use the "information" on websites as advertising.¹⁶ For some topics, team members searched the clinic's entire website for the information. Overall, we coded sixty data points for each clinic. To analyze the data after they were collected, I used Microsoft Excel and Stata.

There are several limitations on my research design. First, because I only evaluate the websites of SART members, my findings do not represent the entire universe of U.S. fertility clinics. A small number of clinics are not SART members, and I cannot provide any information about their websites. However, roughly 95% of clinics are members of SART, so the study captures the vast majority of clinics.¹⁷

Second, my approach misses some information presented online by clinics. In general, we only coded information on the Home and About pages, missing other pages, and we did not code information on social networking sites, which 30% of clinics use.¹⁸ I limited our observations to the Home and About pages because some websites had a large number of pages, which would make the project unduly burdensome. Also, because the Home page is the first page potential patients see and because the About page is a probable place people seek information about the clinic, the information on these two pages is the most likely to be salient to patients.

15. Omurtag et al., *supra* note 6, at 89, 91.

16. Tarun Jain & Robert L. Barbieri, *Website Quality Assessments: Mistaking Apples for Oranges*, 83 FERTILITY & STERILITY 545, 546 (2005) ("Although there might be exceptions, the primary function of fertility clinic websites is to describe their services, with the goal of attracting more patients to use those services (a classic advertising model).").

17. Huang et al., *supra* note 13, at 543.

18. Omurtag et al., *supra* note 6, at 89.

Finally, I did not evaluate inter-rater reliability, so it is possible that different members of the research team coded information differently. Yet, the protocol did not generally leave any room for subjective interpretations, so the risk of disparate coding is remote. Similar studies in the past also did not report inter-rater reliability assessments.¹⁹

II. HOW DO FERTILITY CLINICS MARKET THEIR SERVICES?

This Part presents data on one of the core issues this study hopes to address—how do clinics market their services? This Part attempts to answer the question by cataloging the different features that clinics highlight on their websites. I group these different features into four broad categories: nonpropositional content, attributes of care, third-party assessments of the clinics, and financial information. Past research has focused on small aspects of fertility advertising²⁰ or mentioned advertising in passing,²¹ but no studies have undertaken a broad survey of how clinics advertise their services.

Websites are an important form of advertising because clinics communicate information to persuade potential patients without having to explicitly advertise. People generally dislike advertising,²² and they distrust it.²³ Thus, companies sometimes disguise what is really advertising in other formats like editorials to make it more believable to consumers.²⁴ Clinic websites often integrate “supposedly objective medical information” and “commercial interests,” creating an important source of advertising for clinics.²⁵

Understanding how fertility clinics market their services on websites has the potential to reveal two conflicting types of information about the interaction between patients and clinics. On the one hand, it might provide information about what patients think is important about clinics. On the other hand, it might only reflect clinics’ attempts to frame the interaction in a way that draws patients even

19. *E.g.*, Huang et al., *supra* note 13, at 543 (“[T]he interrater reliability was not assessed. Nevertheless, because the websites were evaluated according to a set of objective criteria, we believe that interrater reliability should not be a significant factor in this study.”).

20. *See id.* at 542 (addressing advertising of success rates).

21. *E.g.*, THE PRESIDENT’S COUNCIL ON BIOETHICS, *supra* note 2 at 153 (“ART clinics advertise for business, emphasizing the range of procedures they offer to infertile couples.”).

22. Eric Goldman, *A Coasean Analysis of Marketing*, 2006 WIS. L. REV. 1151.

23. REBECCA TUSHNET & ERIC GOLDMAN, *ADVERTISING & MARKETING LAW: CASES AND MATERIALS* 8 (2012).

24. *Id.* at 71 (“Consumers frequently treat advertising as less credible than editorial content. A 2005 study by Jansen and Resnick illustrates this phenomenon. Consumers were shown multiple sets of Internet search results, some of which were labeled as advertising. Although the search results were identical, consumers rated the unlabeled search results as more relevant than the labeled results. . . . In other words, the label ‘advertising’ single-handedly caused consumers to think the content was less relevant. For this reason . . . advertisers have incentives to make ads look like editorial content, sometimes by mimicking a publication’s font and layout.” (citations omitted)).

25. Robert Klitzman, Beata Zolovska, William Folberth, Mark V. Sauer, Wendy Chung & Paul Appelbaum, *Preimplantation Genetic Diagnosis on In Vitro Fertilization Clinic Websites: Presentations of Risks, Benefits and Other Information*, 92 FERTILITY & STERILITY 1276, 1283 (2009).

though the patient may have selected another clinic if they had better information or the information had been presented differently. Determining which of these categories the advertising falls within is obviously a difficult task.

First, the features that clinics choose to advertise might reveal the factors that they think patients use to decide which clinic to select for care. Because clinics have a financial incentive to understand patient decision making, clinics' perceptions of what patients value likely mirror how patients actually decide on their fertility clinic.

Very often people make decisions based on one or two attributes they consider most important.²⁶ Lexicographic decision making is a frequent shortcut people use in which the decision maker picks one attribute and selects the product or service based on which one excels in that attribute.²⁷ Assuming clinics are advertising themselves with patients' actual values in mind, this study can show which attributes of fertility care are most important to people.

Some research exists on how people select a clinic, but it is based on surveys.²⁸ While it is very valuable, survey-based research has limitations, such as people misremembering events in the past or misreporting information. My approach supplements this existing research by offering another way to ascertain why people pick their clinics. While it of course presents other problems of its own, studying businesses' behavior is a useful proxy to determine how consumers think because businesses often have more information about the consumer's decision making than the consumer.²⁹

26. ROBERT B. CIALDINI, *INFLUENCE: THE PSYCHOLOGY OF PERSUASION* 274 (2007) ("Very often in making a decision about someone or something, we don't use all the relevant available information; we use, instead, only a single, highly representative piece of the total. And an isolated piece of information, even though it normally counsels us correctly, can lead us to clearly stupid mistakes . . .").

27. See Amy B. Monahan, *Value-Based Mandated Health Benefits*, 80 U. COLO. L. REV. 127, 141 (2009) ("One of the simplest strategies, so-called lexicographic decisionmaking, involves the purchaser choosing 'the option with the highest ranking on the most important attribute.' If premiums are the most important factor to a health insurance purchaser, under the lexicographic model he or she would simply select the health insurance plan that offers the lowest premiums, disregarding other factors. A more complex decisionmaking model is a modified weighted adding strategy, where the decisionmaker makes 'trade offs among desirable features of health insurance plans,' but only includes high-importance factors in his or her weighting." (footnotes omitted)).

28. E.g., Amir Lass & Peter Brinsden, *How Do Patients Choose Private In Vitro Fertilization Treatment? A Customer Survey in a Tertiary Fertility Center in the United Kingdom*, 75 FERTILITY & STERILITY 893 (2001); Hani J. Marcus, Diana M. Marcus & Samuel F. Marcus, *How Do Infertile Couples Choose Their IVF Centers? An Internet-Based Survey*, 83 FERTILITY & STERILITY 779 (2005). Marcus et al. concluded that:

In conclusion, our study demonstrated that the two most important factors for couples choosing an IVF center were the success rate and the quality of the services provided by the center. Other important factors that affected the decision were recommendation by a doctor, cost of treatment, distance from home, and special expertise of the clinic.

Marcus et al., *supra*, at 781.

29. See, e.g., Oren Bar-Gill, *The Behavioral Economics of Consumer Contracts*, 92 MINN. L. REV. 749, 799 (2008) ("Credit card issuers often have more information about how a consumer will use the credit card than the consumer herself. First, issuers have detailed

But, on the other hand, understanding how clinics advertise might reveal whether they are trying to exploit irrational decision making by patients by framing the transaction in a way that emphasizes certain attributes of the clinic and deemphasizes others. The rational actor model of human decision making assumes that people have the ability to process information in a way that maximizes their well-being. Yet, despite its theoretical appeal, “little hard data exist on how, analytically, consumers make decisions about purchasing” fertility care.³⁰ It is possible that patients make suboptimal decisions that they would not otherwise make if clinics advertised differently. Because clinic advertisements show how the clinics frame the transaction, we can use the frequency of certain attributes that are advertised to assess whether people are using faulty measures and whether clinics are capitalizing on such mistakes.³¹ In suggesting that clinics could frame the transaction to cause patients to make mistakes in selecting their clinics, I am not suggesting that fertility patients are irrational in any unique way.³² Instead, I am just employing the findings of behavioral economics that suggest all consumers act with bounded rationality.³³

Finally, the features that clinics advertise can affect patients’ actual experiences at the clinic. Advertisements, even if they are promoting features of fertility care that are irrelevant to consumers’ experiences with clinics, can cause consumers to prefer the clinic.³⁴ More surprisingly, advertisements can cause people to remember the experience with the clinic in accordance with the advertised claims. For instance, if a clinic claims to offer a caring environment, the patient may experience and remember the clinic as caring. Rebecca Tushnet and Eric Godman explain:

[A]ds can distort memory and perception, even when consumers have direct experience with a product. Researchers showed people a false claim of “no bitterness” in coffee and then had them taste coffee made bitter by deliberate over-brewing. Consumers who’d seen the ad and tasted the coffee rated the coffee as less bitter than consumers who had

statistics about card use; this includes statistics about card use in the consumer’s demographic and socio-economic group. Second, issuers have information on the individual consumer from the credit card application and from credit bureaus. Third, and most importantly, since issuers often maintain long-term relationships with consumers, they quickly obtain information about how this specific consumer uses this specific card.” (footnotes omitted)).

30. Cf. Russell Korobkin, *The Efficiency of Managed Care “Patient Protection” Laws: Incomplete Contracts, Bounded Rationality, and Market Failure*, 85 CORNELL L. REV. 1, 47 (1999) (making the comment in the context of consumer picking health insurance).

31. See *id.* at 55–56 (“In such situations, the choice of a decision-making approach might depend highly upon which comparisons the presentation renders salient.”).

32. See generally Jody Lyneé Madeira, *Woman Scorned?: Resurrecting Infertile Women’s Decision-Making Autonomy*, 71 MD. L. REV. 339 (2012).

33. For a review of the literature in the legal context, see generally Cass R. Sunstein, *Boundedly Rational Borrowing*, 73 U. CHI. L. REV. 249 (2006).

34. See Gregory S. Carpenter, Rashi Glazer & Kent Nakamoto, *Meaningful Brands From Meaningless Differentiation: The Dependence on Irrelevant Attributes*, 31 J. MARKETING RES. 339 (1994) (finding that consumers preferred products after seeing advertisements promoting irrelevant attributes despite the fact that the consumers were told that the attributes promoted were irrelevant).

only tasted the coffee. Even though the tasting had some effect on the first group's opinions, they still ended up being affected by the ad in the face of directly contradictory experience. This result—that ads can change memories, even memories of direct experiences—has been confirmed in numerous other contexts by other researchers. . . . People generally play along with advertising, making efforts to confirm advertising-generated expectations and to avoid feeling like a dupe who believed an untrue claim.³⁵

Thus, studying the attributes clinics promote can also offer insight into how patients experience their fertility care.

After describing the different types of advertising clinics use, I compare academic and private clinics to understand how these types of clinics advertise differently. Also, I compare clinics in states that mandate that insurance companies cover infertility with states that do not have such a mandate.

A. Advertising that Lacks Informational Content

As a primary matter, some of the advertising we observed did not communicate propositional information but instead communicated primarily emotional content to the observer. Looking just at the Home page of each fertility clinic's website, we coded whether the first page had images of babies and whether it used the words "dream" or "miracle." Of the 372 clinics with websites, 79.03% (n=294) presented images of babies on the Home page of their websites; 30.11% (n=112) used the word "dream" on the Home page; and 8.87% (n=33) used the word "miracle."

Presenting images of babies could have several effects on potential patients. First, it is possible that customers will disregard the costs of the fertility services in light of the value of children. Patients may be unwilling to commodify children, so they are unable to assess the costs of fertility care versus the value of a child. Russell Korobkin observes:

Research indicates that a primary way in which consumers attempt to avoid such negative affect is to adopt selective or noncompensatory decision-making strategies, which enable them to avoid the explicit trade offs that a compensatory, nonselective approach requires. Adopting a "choose-the-cheapest-car" strategy can help a consumer to avoid the emotional consequences associated with determining whether to pay an additional \$500 for a car with an airbag. The desire to avoid explicit trade offs can be heightened when a strong social norm militates against commodifying one or more of the features at issue. For example, if individuals believe that sacrificing environmental quality for money or comfort is wrong, they will be less likely to use a compensatory strategy to determine whether to purchase a car that is

35. TUSHNET & GOLDMAN, *supra* note 23, at 28 (citing Jerry C. Olson & Philip A. Dover, *Cognitive Effects of Deceptive Advertising*, 15 J. MARKETING RES. 29 (1978)); Kathryn A. Braun, *Postexperience Advertising Effects on Consumer Memory*, 25 J. CONSUMER RES. 319 (1999).

cheap and luxurious or one that is expensive and uncomfortable but emits less carbon monoxide.³⁶

Placing the focus on a picture of a baby as a noncommodity may displace concerns about cost in customers' minds. This observation echoes the criticism that clinics frame their relationship with patients as noncommercial, another means of preventing more explicit awareness of costs concerns.³⁷

Another effect of images of babies is that the images might suggest the outcome of treatment—a successful pregnancy. Advertising scholars note that advertisements that present images and allow viewers to draw their own conclusions are more persuasive to customers than direct claims or even verbal metaphors.³⁸ If patients see children and come up with an association between treatment and pregnancy on their own, they are more likely to act on the information.³⁹ Thus, it is possible that images of successful pregnancies are even more persuasive than clinics' frequent claims about their success rates. However, the preoccupation with success rates in the literature on fertility clinic advertising has caused scholars to neglect another, potentially more powerful, mechanism through which clinics suggest that they have high success rates—pictures of success.⁴⁰

The criticisms of using the words “dream” and “miracle” fall in line with this second criticism of pictures of babies. Scholarship has criticized clinics for using the word “miracle” because it creates a false hope for patients.⁴¹ Similarly, focusing on dreams, academics contend, causes patients to underestimate the costs involved in fertility treatments.⁴²

36. Korobkin, *supra* note 30, at 55.

37. See Krawiec, *supra* note 3, at 213 (“For their part, fertility centers do little to alter the perception that their relationship with infertile couples is a non-commercial one, highlighting instead their willingness and ability to help infertile couples realize their dreams of conception. . . . Although marketing rhetoric of this sort is hardly unique, particularly in the health care field, it does highlight a common trend evident across all sectors of the baby market—a pretense that profit-seeking and market forces are, at best, secondary considerations in matters so sacred as reproduction and parenthood.”).

38. TUSHNET & GOLDMAN, *supra* note 23, at 30–31.

39. *See id.*

40. *See infra* notes 41–49 and accompanying text.

41. Catherine A. Clements, *What About the Children? A Call for Regulation of Assisted Reproductive Technology*, 84 IND. L.J. 331, 348 (2009) (“ART’s ‘wild west’ status is particularly evident when a review of a local fertility clinic Web site proclaims proudly on its banner: ‘Expect a Miracle!’ Despite examples of such advertising that might give false hope to infertility patients, some insist that the industry can police itself.” (footnotes omitted)); *Developments in the Law—Medical Technology and the Law*, 103 HARV. L. REV. 1519, 1539–40 (1990) (“Both clinics and the media have portrayed IVF as a technique that combines low risk with high success. As a result, many people enter the clinics unrealistically anticipating immediate success. . . . By nevertheless hailing IVF as a ‘miracle cure’ and ‘scientific breakthrough’ providing hope for the infertile, media reports reinforce the importance of the biological component of parenthood.” (footnotes omitted)).

42. Teresa Stanton Collett, *Whose Life Is It Anyway?: Texas Public Policy and Contracts to Kill Embryonic Children*, 50 S. TEX. L. REV. 371, 371–72 (2009) (“Fertility clinic advertisements, adorned with pictures of happy infants and their parents, promise what seems unattainable, yet so desirable, to infertile couples who see children as an integral part

B. Attributes of Care

In addition to these nonpropositional forms of advertising, clinics promote themselves based on specific characteristics of the care that they provide. To obtain an understanding of what attributes of care clinics most frequently emphasize, we recorded each time a clinic's Home page or About page mentioned that the clinic: (1) had excellent technology; (2) provides personal, caring treatment; (3) had high quality doctors; (4) had access to donors for patients; (5) had been the "first" to make some advance or offer some treatment in the nation or a region; (6) specialized in "hard to treat" cases; (7) had large facilities; and (8) was equipped to help older patients. To compare the frequency with which these attributes of care appeared with claims about success rates, I also present here the number of websites mentioning success rates on the Home and About pages. The results are summarized in Table 1.

Table 1: Attributes of Care Advertised on Fertility Clinic Websites

Attribute of Care	Percentage Mentioning	Number (of 372 websites)
Excellent Technology	83.87	312
Personal Care	75.00	279
High Quality Doctors	69.89	260
Donors	56.45	210
Success Rates	55.65	207
"Firsts"	25.81	96
Hard to Treat Cases	18.55	69
Facilities	12.37	46
Older Patients	5.91	22

The fact that so many clinics advertise features other than success rates undermines a central belief that has animated scholarship about, and legal intervention into, the fertility business. Scholars and legislators have traditionally thought that success rates are the most salient factor in patients' minds when picking a clinic. As one example, a past study of clinic websites concluded that "apart from advertising the availability of donor egg programs and embryo cryopreservation, IVF success rates were the most commonly advertised feature on fertility clinic websites."⁴³

Concerns about success rates have dominated discussions of consumer protection for ART by legal academics for more than two decades.⁴⁴ The only

of their lives together. . . . Yet the lived experiences of many couples who have attempted to create a child through IVF are far from the idyllic dreams that led them to the clinics.").

43. Mary E. Abusief, Mark D. Hornstein & Tarun Jain, *Assessment of United States Fertility Clinic Websites According to the American Society for Reproductive Medicine (ASRM)/Society for Assisted Reproductive Technology (SART) Guidelines*, 87 FERTILITY & STERILITY 88, 92 (2007).

44. See, e.g., *Developments in the Law—Medical Technology and the Law*, supra note 41, at 1541 ("The distorted reporting of success rates exemplifies the industry's willingness to place its own interests above its patients."); Jean Macchiaroli Eggen, *The "Orwellian Nightmare" Reconsidered: A Proposed Regulatory Framework for the Advanced Reproductive Technologies*, 25 GA. L. REV. 625, 648 (1991) ("Upon entering a program in

federal law, The Fertility Clinic Success Rate and Certification Act of 1992,⁴⁵ as well as several state laws, take aim at accurate reporting of success rates.⁴⁶ Success rates have even made appearances in court decisions.⁴⁷

Ethical opinions by ASRM about advertising have been primarily focused on success rates. The first guideline in 1999 only discussed advertising of success rates.⁴⁸ The first sentence in both the 2004 and 2009 ASRM advertising guidelines also reveals that those versions of the guidelines are essentially focused on success rates: “Both patients and referring physicians have a right to know pregnancy rates derived from assisted reproduction programs.”⁴⁹

advanced reproductive technology, the couple’s primary need is to obtain accurate, realistic information regarding the available procedures and their likelihood of success in the program.”); Michele Goodwin, *Prosecuting the Womb*, 76 GEO. WASH. L. REV. 1657, 1722 (2008) (discussing how clinics manipulate their success rates); Jaime Staples King, *Living ART*, 23 HASTINGS WOMEN’S L.J. 73, 73–74 (2012) (citing “high success rates” as the driving factor behind the author’s choice of a fertility clinic); Alicia Ouellette, Arthur Caplan, Kelly Carroll, James W. Fossett, Dyrleif Bjarnadottir, Darren Shickle & Glenn McGess, *Lessons Across the Pond: Assisted Reproductive Technology in the United Kingdom and the United States*, 31 AM. J.L. & MED. 419, 424–28 (2005) (describing the deficiencies of the laws governing disclosures of success rates in the United States); Usha Rengachary Smerdon, *Crossing Bodies, Crossing Borders: International Surrogacy Between the United States and India*, 39 CUMB. L. REV. 15, 29 (2008) (noting that criticisms of ART in India include “inflation of success rates”); Urška Velikonja, *The Costs of Multiple Gestation Pregnancies in Assisted Reproduction*, 32 HARV. J.L. & GENDER 463, 482–83 (2009) (explaining the federal law regarding success rates and the “perverse incentives” it creates); Stephanie J. Hong, Note, *And “Cloning” Makes Three: A Constitutional Comparison Between Cloning and Other Assisted Reproductive Technologies*, 26 HASTINGS CONST. L.Q. 741, 755–57 (1999) (describing the Fertility Clinic Success Rate and Certification Act of 1992 and noting that “the Act’s reforms are not particularly novel or efficacious”).

45. 42 U.S.C.A. § 263a-1 (West 2011) (requiring that fertility clinics report pregnancy success rates to the Centers for Disease Control using a specified format).

46. See, e.g., 18 PA. CONS. STAT. § 3213(e) (2012) (“All persons conducting, or experimenting in, in vitro fertilization shall file quarterly reports with the department, which shall be available for public inspection and copying, containing the following information: . . . (5) Number of eggs fertilized . . . (6) Number of women implanted with a fertilized egg.”); VA. CODE ANN. § 54.1-2971.1 (2012) (“Before a physician commences treatment of a patient by in vitro fertilization, gamete intrafallopian tube transfer, or zygote intrafallopian tube transfer, including the administration of drugs for the stimulation or suppression of ovulation prefatory thereto, a disclosure form shall have been executed by the patient which includes, but need not be limited to, the rates of success for the particular procedure at the clinic or hospital where the procedure is to be performed. The information disclosed to the patient shall include the testing protocol used to ensure that gamete donors are free from known infection with human immunodeficiency viruses, the total number of live births, the number of live births as a percentage of completed retrieval cycles, and the rates for clinical pregnancy and delivery per completed retrieval cycle bracketed by age groups consisting of women under thirty years of age, women aged thirty through thirty-four years, women aged thirty-five through thirty-nine years, and women aged forty years and older.”).

47. *Karlin v. IVF Am., Inc.*, 712 N.E.2d 662, 664–65 (1999).

48. Huang et al., *supra* note 13, at 542.

49. Soc’y for Assisted Reprod. Tech. Exec. Council, *SART Policy for Advertising by ART Programs*, available at http://www.sart.org/uploadedFiles/Affiliates/SART/Members/Executive_Council/sart-advertising-policy-4-2009.pdf [hereinafter SART Executive

Significantly, however, this study of clinic websites reveals that more clinics emphasize the technology the clinic offers; the personal, caring approach the clinic takes; the high quality of the doctors the clinic employs; and the access the clinic offers to donors than the clinic's success rates. The frequency with which clinics highlight these other features should widen the myopic fixation that scholarship and policymaking has had on success rates. As discussed above, this finding might demonstrate that other factors are important to patients, if we assume clinics are attempting to match patients' informational needs. Alternatively, it might reflect clinics' attempts to frame the transaction to emphasize attributes they think will make them attractive to patients. For instance, if a clinic's success rate were lower than its competitors, perhaps the clinic would emphasize other subjective factors like its technological prowess or quality of its doctors to focus patients' attention on those attributes instead of its lower success rate. In either case, policy makers need to account for clinics' behavior of advertising factors other than success rates.

C. Third-Party Assessments of the Clinic

Another category of advertising that clinics' websites rely on is advertising based on third-party assessments of the clinics. Looking just at the Home and About pages of the websites for each classification, we recorded every time the clinic mentioned that the doctor or clinic was board certified. These certifications came from organizations such as the American Board of Obstetrics & Gynecology. Second, we noted if the clinic mentioned it was part of a professional association, most often ASRM. Next, we looked for other endorsements by another type of group. This classification included endorsements by "Top Doctors" lists in a region, by magazines, and by the Patients' Choice Award. Finally, we noted the number of websites that included patient testimonials. These data are presented in Table 2.

Table 2: Frequency of Home and About Pages Discussing Third-Party Assessments

	Percentage	Number
Board Certification	51.08	190
Professional Associations	37.10	138
Other Third-Party Endorsements	26.61	99
Patient Testimonials	43.01	160

Third-party assessments in the first three classifications are significant from a practical standpoint because patients may lack the ability or knowledge to assess what clinic is best for them. The sort of third-party endorsements in the first three groups in Table 2 act like information intermediaries or expert conduits of medical information who "locate information relevant to the parties they represent, analyze and distill it, and communicate it fairly and accessibly to individual consumers."⁵⁰

Council]; Practice Comm. of the Soc'y for Assisted Reproductive Tech. & the Am. Soc'y for Reprod. Med., *Guidelines for Advertising by ART Programs*, 82 FERTILITY & STERILITY 527, 527 (2004).

50. William M. Sage, *Regulating Through Information: Disclosure Laws and American*

These intermediaries are advertising authority figures to which people are likely to respond.⁵¹

Take board certification as one example of an information intermediary. Studies reveal that whether a physician is board certified is an important factor in how consumers choose physicians. For instance, a study analyzing twenty-three factors consumers use to select their primary care physician found that the most important factor was whether a physician was board certified.⁵² Similarly, another study found that half of health care consumers would be very likely to find another physician if they found their physician's board certification had expired.⁵³ Another study found that of the nearly 4,000 consumers surveyed, 82% found board certification for a physician to be an "important or very important" factor in selecting physicians for their children.⁵⁴

Although they do not present any expertise, patient testimonials are important because of the principle of social proof. Social psychologist Robert Cialdini explains: "[O]ne means we use to determine what is correct is to find out what other people think is correct. . . . The tendency to see an action as more appropriate when others are doing it normally works quite well."⁵⁵ He uses the example of laughter tracks and television. Despite the fact most people dislike canned laughter, studies show that people rate humorous material as funnier if it is accompanied by canned laughter.⁵⁶ In the same way, patient testimonials help the clinic indirectly communicate how it wants potential patients to act. The efficacy of patient testimonials is demonstrated not only by their presence on clinics' websites but also by the federal law governing them. The Federal Trade Commission (FTC) requires that advertisers must be able to substantiate any claims made by patients in testimonials the advertiser uses.⁵⁷

Health Care, 99 COLUM. L. REV. 1701, 1737 (1999). Another way of looking at the function of board certification, professional associations, and endorsements is as trustmarks:

With upstream filtering, on the other hand, experts review and evaluate the content. The result of such an approach, which has been suggested by several people, could be the creation of a[n ASRM] 'trustmark' mechanism. . . . The time is ripe for the ASRM, perhaps in partnership with consumer organizations such as RESOLVE, INCIID, and AFA, to launch a task force to study the problem of managing infertility information on the Internet and proposing useful solutions.

Yakov M. Epstein & Helene S. Rosenberg, *Assessing Infertility Information on the Internet: Challenges and Possible Solutions*, 83 FERTILITY & STERILITY 553, 555 (2005).

51. Cf. CIALDINI, *supra* note 26, at 213.

52. Brian H. Bornstein, David Marcus & William Cassidy, *Choosing a Doctor: An Exploratory Study of Factors Influencing Patients' Choice of a Primary Care Doctor*, 6 J. EVALUATION CLINICAL PRAC. 255 (2000).

53. THE GALLUP ORG. FOR THE AM. BD. OF INTERNAL MED., AWARENESS OF AND ATTITUDES TOWARD BOARD-CERTIFICATION OF PHYSICIANS (2003).

54. Gary L. Freed, Kelly M. Dunham, Sarah J. Clark & Matthew M. Davis, *Perspectives and Preferences among the General Public Regarding Physician Selection and Board Certification*, 156 J. OF PEDIATRICS 841, 843 (2010).

55. CIALDINI, *supra* note 26, at 116.

56. *Id.* at 115-16.

57. TUSHNET & GOLDMAN, *supra* note 23, at 202 ("FTC Guides Concerning the Use of Endorsements and Testimonials in Advertising, § 255.2 Consumer Endorsements (a) An advertisement employing endorsements by one or more consumers about the performance of

D. Financial Information

The final type of advertising clinics rely on is financial information. Clinics advertise themselves based on the prices of the care they offer, the insurance they accept, and the access they provide to financing arrangements.

1. Price

Price is usually one of the most important terms in a consumer transaction,⁵⁸ so we might guess that price would be an important point of competition between fertility clinics that the clinics highlight on their websites. The facts that most people have to pay for fertility treatments out of pocket and that the treatments are expensive bolster this intuition.

As it turns out, however, price plays only a very minor role in advertising fertility services through clinics' websites. Only 27.15% of websites (n=101) list some sort of actual price for IVF, with the vast majority not providing any information on the amount IVF costs at the clinic. Almost twice that number, 54.84% (n=204), market themselves because of price on the Home page or the About page of the clinics' websites (despite not listing the actual price). Still, given the usual preeminence of price in consumer decision making, it is surprising that only half of the websites mention price at all as a reason to select the clinic.

There are several possible explanations for why more websites do not list prices or advertise the clinics because of cost. First, it could reflect the general aversion medical professionals have for discussing prices with patients.⁵⁹ Second, the lack of pricing information might result from an inability to predict ahead of time the cost of treatment because each patient's situation is different, and accurate price quotations can only be obtained after actually seeing a doctor.⁶⁰ Another possible explanation, however, is that most clinics do not think cost is an important factor in patients' decisions about their fertility provider or that most clinics do not want patients to know the cost of the treatment upfront because it might make them less inclined to seek treatment. It is difficult to think that patients are unconcerned about price, and it is difficult to construct a rational-choice explanation for clinics' failure to discuss price on their websites. Thus, it seems more likely that clinics are purposefully refusing to present price information to focus patients' attention away from price.

an advertised product or service will be interpreted as representing that the product or service is effective for the purpose depicted in the advertisement. Therefore, the advertiser must possess and rely upon adequate substantiation, including, when appropriate, competent and reliable scientific evidence, to support such claims made through endorsements in the same manner the advertiser would be required to do if it had made the representation directly, i.e., without using endorsements. Consumer endorsements themselves are not competent and reliable scientific evidence.”)

58. Oren Bar-Gill, *Bundling and Consumer Misperception*, 73 U. CHI. L. REV. 33, 45 (2006).

59. Mark A. Hall & Carl E. Schneider, *Patients as Consumers: Courts, Contracts, and the New Medical Marketplace*, 106 MICH. L. REV. 643, 654–55 (2008).

60. Carl E. Schneider & Mark A. Hall, *The Patient Life: Can Consumers Direct Health Care?*, 35 AM. J.L. & MED. 7, 20 (2009).

Clinics that do promote themselves because of price use a variety of approaches. Many clinics straightforwardly assert they are less expensive than competitors. Problematically, some clinics claim to have lower prices but fail to list the price so that consumers can assess the truthfulness of the claim.⁶¹ Along the same lines, one clinic notes the fact that its prices are competitive and that it does not have hidden fees, despite the fact it does not list its fees.⁶²

The high cost of their services does not appear to dissuade some clinics from advertising that they are cost-conscious providers. One clinic notes that it offers the “most affordable fees possible,” despite the fact that it charges \$11,750 for an IVF cycle, nearly the highest price in the country.⁶³ Another clinic charging \$9,000 for one IVF cycle, well above the average cost, claims to have “the most competitive pricing in the greater Washington area.”⁶⁴ With so little pricing information available, it would be hard for consumers to assess these claims.

In addition to general claims about low costs, other websites market the clinic based on price by touting the clinic’s IVF refund program.⁶⁵ Finally, clinics embrace common advertising techniques such as “limited-time offers”⁶⁶ or discounts for certain groups, like military personnel.⁶⁷

Even when clinics do list prices, it is extremely difficult to compare prices between clinics because they bundle their services differently. Clinics mostly present a single price for IVF packages, but they include different services in these packages.⁶⁸ Some are very inclusive, offering a price for packages with the required monitoring, egg harvesting, embryo transfer, intracytoplasmic sperm injection (ICSI), assisted hatching, and cryopreservation. Others, however, quote prices for plans that include almost no services, not even monitoring.⁶⁹ Other clinics are less clear, stating prices without providing any information about what is included. One website states, “IVF for \$5,000. Reduces the cost of a cycle with Shared IVF.”⁷⁰ The website, however, provides no further breakdown or explanation of the price of services. Finally, some websites list the cost of participating in an IVF refund program but do not list the price for treatments outside the plan,⁷¹ so patients are left to only compare the one clinic with other clinics offering refund programs.

61. *E.g.*, Observation 368 (stating “[o]ur fertility services consistently cost 1/3 less than the big, corporate fertility clinics” without listing a price); Observation 357 (noting that the clinic’s “costs for IVF are among the lowest in the country” without stating a price).

62. Observation 361 (“In these challenging times our prices remain competitive and extremely fair. All inclusive package prices insure that our patients will not be surprised by hidden extra charges that can inflate treatment cost significantly.”).

63. Observation 82.

64. Observation 355.

65. *E.g.*, Observation 372 (“Financial Flexibility: [The clinic] now offers options for shared risk IVF through our Shared Success Program.”). *See infra* Part II.D.3 (discussing IVF refund programs).

66. Observation 125; Observation 168.

67. Observation 349.

68. Ha T. Tu & Jessica H. May, *Self-Pay Markets in Health Care: Consumer Nirvana or Caveat Emptor?*, 26 HEALTH AFF. w217, w222 (2007).

69. Observation 223.

70. Observation 7.

71. *E.g.*, Observation 217; Observation 258.

The inability to price shop presents a significant market failure. If patients do not have access to pricing information without going into a clinic for an evaluation or at least calling the clinic to get pricing information, the search costs may be too high to enable a functioning market. Moreover, if patients lack the ability to compare clinics even when they do know the relevant pricing and packages, the market cannot generate competitive pressure to lower costs.

Because we reviewed the price of every clinic that lists its price on its website, I am able to present data on the average cost of IVF in the United States. To try to obtain price figures that were comparable between different websites, we recorded the price of one cycle of IVF using fresh (not previously frozen) embryos, but not including the cost of ICSI, assisted hatching, or medications. For many websites, this required that we carefully read what is included in the listed price and subtract or add the cost of different services. If we found a price listed that included the cost of ICSI or assisted hatching but did not list the price of those services separately, I subtracted \$1200 for ICSI and \$1000 for assisted hatching, basing those rough estimations on the cost of the services at several clinics.⁷² Also, several websites listed prices that only included doctors' fees or "mini-IVF" cycles⁷³ or excluded monitoring, so I excluded those from my analysis of prices. Based on the remaining ninety-two websites, the mean price was \$8117.25, the median price was \$8360, the lowest price was \$4000, and the highest price was \$12,415. These price figures are lower than what is commonly reported, most likely because my figures do not include ICSI, assisted hatching, or medications. Adding those common services would raise the mean price to \$12,317.25 and the median price to \$12,560, assuming medications cost \$2000, ICSI costs \$1200, and assisted hatching costs \$1000.

2. Insurance

Only 16.40% (n=61) of clinics mention insurance on their Home and About pages as a means of advertising the clinic. Several factors may explain the low frequency. This finding could merely reflect the fact that websites contain information about insurance on financial pages and not their Home or About pages, but it is surprising more websites do not highlight insurance on their central pages if insurance is an important way to pay for fertility care.⁷⁴ Or, it could be that websites do not mention it because so few patients have insurance that covers the

72. See Observation 9 (listing the cost of ICSI as \$1525); Observation 374 (listing the cost of ICSI as \$900); Observation 349 (listing the cost of ICSI as \$1990 and the cost of assisted hatching as \$1290); Observation 355 (listing the cost of ICSI as \$1500 and the cost of assisted hatching as \$950).

73. E.g., Observation 229; Observation 235.

74. Judith F. Daar, *Accessing Reproductive Technologies: Invisible Barriers, Indelible Harms*, 23 BERKELEY J. GENDER L. & JUST. 18, 38 (2008) ("Thus, it appears that socioeconomic status, and to a lesser extent employment status, significantly affect one's ability to access ART services in the United States. For wealthy individuals who can afford to pay directly for these services, access, for the most part, appears to be wide open. For individuals covered by private health insurance that includes infertility benefits, access would again seem open, with limitations based on the patient's ability to afford co-payments or non-covered services." (footnote omitted)).

procedures. But, even in states that mandate that insurance companies cover infertility treatments, only 21.21% (n=14) mention the insurance plans they take on the Home or About pages. This finding corresponds with past work that has found that insurance mandates alone do not increase utilization rates.⁷⁵

Clinics mentioning insurance primarily advertise themselves by noting that they accept a wide variety of insurance plans.⁷⁶ Also, clinics emphasize that they work with patients to file the claims with insurance companies, often as part of their pitch that they offer caring services.⁷⁷ For instance, one website notes: “Our financial coordinators are experts in healthcare insurance issues, especially those relating to infertility benefits. This expertise allows them to serve as advocates for our patients; knowing who to contact and what questions to ask to determine fertility benefits.”⁷⁸ Additionally, clinics seem to intend to mitigate concerns about cost by suggesting that “patients find they have more insurance coverage than anticipated.”⁷⁹

3. Loans and Refund Programs

Two other important financial programs that fertility clinics advertise are loans and IVF refund programs. Clinics emphasize their own ability to loan money to patients or their relationships with third-party lenders to promote themselves,⁸⁰ and they offer, either directly or through a third party, IVF refund programs in which the patient pays a higher fee upfront but is guaranteed either a pregnancy or a refund.⁸¹ My current study did not evaluate the frequency at which clinics advertise these two programs because prior work had already done so. In a prior study, I found that, when evaluating all the pages of a website, 48.5% mentioned credit on their websites, and of those mentioning credit, 52.4% marketed themselves because of the credit or marketed the credit itself.⁸² Similarly, 35.4% of websites advertised IVF refund programs.⁸³

75. *Id.* at 37 (“In fact, studies show that private insurance mandates for fertility treatment have little or no overall effect on the use of such treatments in the United States. Researchers postulate that the reason for the low impact of private insurance mandates on treatment utilization can be explained by examining the demographic characteristics of those who are affected by changes in health insurance coverage. Because insurance mandates only affect individuals who have access to private health insurance, this group is generally wealthier and more likely to be employed than the general population. These are often the same individuals who can access ART with their own resources; thus the marginal benefit from insurance coverage tends not to increase usage among the insured.”).

76. Observation 201 (listing around fifty plans with which the clinic works); Observation 233 (“[The clinic] accepts most major insurance plans . . .”).

77. Observation 79 (“[W]e help with the emotional stresses of infertility, as well as with insurance coverages and financial options.”).

78. Observation 51.

79. Observation 125.

80. See generally Jim Hawkins, *Doctors as Bankers: Evidence from Fertility Markets*, 84 TUL. L. REV. 841 (2010).

81. Jim Hawkins, *Financing Fertility*, 47 HARV. J. ON LEGIS. 115, 119 (2010).

82. Hawkins, *supra* note 80, at 861.

83. Hawkins, *supra* note 81, at 118.

E. Comparing Academic Clinics' and Private Clinics' Advertising

In addition to understanding what clinics generally use to market themselves, this study offers a way to compare the differences between advertising practices of academic clinics and private clinics. Commentary has suggested that academic medical centers should take the lead in promoting ethical practices,⁸⁴ and this study offers evidence of whether that recommendation is being followed in fertility clinic advertisements.

Past studies have compared the quality of academic clinics' and private clinics' websites and the different levels of compliance with self-regulations.⁸⁵ Abusief et al., for instance, found that private clinics were more likely to publish success rates, and were more likely to engage in illicit comparison marketing, but they were also more likely to define the numerator and denominator of their success rates.⁸⁶

For our study, to determine if a clinic was an academic or a private clinic, we searched the entire website and deemed clinics to be academic if "they [are] either university based and/or part of a hospital that had a graduate medical education (GME) program (as listed within the clinic or hospital website)."⁸⁷ 20.43% (n=76) of the clinics were academic clinics, and 79.57% (n=296) were private clinics.

Like Absuief et al., I found that, in several categories, there were differences between advertising at academic clinics and private clinics, while in other categories the differences were not significant. Results were tested for statistical significance based on the chi-square test of independence, or for results that generated numbers less than five, I used Fisher's exact test. Results were considered significant if the p-value was lower than .05. Table 3 summarizes the comparisons.

84. See Troyen A. Brennan, David J. Rothman, Linda Blank, David Blumenthal, Susan C. Chimonas, Jordan J. Cohen, Janlori Goldman, Jerome P. Kassirer, Harry Kimball, James Naughton & Neil Smelser, *Health Industry Practices That Create Conflicts of Interest: A Policy Proposal for Academic Medical Centers*, 295 JAMA 429, 430 (2006) ("Academic medical centers, which include medical schools and their affiliated hospitals, should provide leadership for medicine in the United States. Just as pharmaceutical manufacturers look to AMCs for influential advice and support, so does the medical profession. Academic medical centers also have a major responsibility for training medical students and house staff. Research reveals that the habits learned or acquired during training persist into practice.").

85. Abusief et al., *supra* note 43.

86. *Id.* at 90 tbl.3.

87. *Id.* at 89.

Table 3: Comparison of Advertising on Academic and Private Clinics' Websites

Type of Advertising	Academic Percentage	Academic Number	Private Percentage	Private Number	p-value
Image of Baby on First Page	57.89	44	84.46	250	0.001
"Miracle" on Home Page	5.26	4	9.80	29	0.264
"Dream" on Home Page	23.68	18	31.76	94	0.207
Excellent Technology	82.89	63	84.12	249	0.795
Personal Care	63.16	48	78.04	231	0.008
High Quality Doctors	59.21	45	72.64	215	0.023
Donors	42.11	32	60.14	178	0.005
Success Rates	39.47	30	59.80	177	0.001
"Firsts"	15.79	12	28.38	84	0.025
Hard to Treat Cases	14.47	11	19.59	58	0.306
Facilities	10.53	8	12.84	38	0.585
Older Patients	3.95	3	6.42	19	0.588
Professional Associations	19.74	15	41.55	123	0.001
Board Certifications	42.11	32	53.38	158	0.079
Endorsements	14.47	11	29.73	88	0.007
Patient Testimonials	19.74	15	48.99	145	0.001
Price	36.84	28	59.46	176	0.001
List Price	15.79	12	30.07	89	0.013
Insurance	11.84	9	17.57	52	0.229

Whether we think academic clinics are leading the way in ethical advertising of course depends on what categories of advertising we think are ethical. Based on my own preferences, the results are mixed. There is no significant difference between the rates at which academic and private clinics use the words "dreams" or "miracles," suggesting they are not acting more ethically, but fewer academic clinics use images of babies on their Home pages. Fewer academic clinics advertise success rates, which have been associated with deception in the past, but on the other hand, academic clinics are not leading the way to encourage price to be an important competitive pressure. Fewer academic clinics than private clinics advertise based on price or list the price of treatment on their websites.

F. Comparing Clinics in States with Mandated Coverage

In addition to comparing academic and private clinics, I compared clinics in states with mandated insurance coverage of infertility and states without such mandates in order to see if clinics advertised differently in these states.

To do the comparison, I omitted Texas, California, Ohio, Louisiana, and New York from the comparisons because these states do not neatly fall within either category of mandated care or the absence of mandated care. Texas only requires that insurance companies offer infertility coverage to employers (and not that employers select such plans), and California, Ohio, Louisiana, and New York mandate coverage but do not mandate that insurers cover IVF.⁸⁸ Omitting these clinics resulted in 135 clinics being dropped from the comparison. I treated Arkansas, Connecticut, Hawaii, Illinois, Maryland, Massachusetts, Montana, New Jersey, Rhode Island, and West Virginia as having mandated IVF coverage and the rest as having no mandated coverage.⁸⁹ Table 4 presents the results on the categories for which there was a statistically significant difference.

Table 4: Comparison of Advertising on Clinics' Websites in States with and Without Mandated Insurance Coverage

Type of Advertising	Nonmandate Percentage	Nonmandate Number	Mandate Percentage	Mandate Number	p-value
Facilities	8.00	14	22.73	15	0.002
Price	55.17	96	37.88	25	0.017
Listing the Price of IVF	27.01	47	15.15	10	0.034

Remarkably, it does not appear, for the most part, that merely having an insurance mandate decreases the number of clinics advertising in different categories. There were no significant differences in the number of clinics using pictures of babies or the words “dream” or “miracle” to bring in patients. Also, it was surprising that states with mandated insurance did not emphasize the insurance plans that they accept more than clinics in states without mandated care.

Overall, this picture of fertility clinic advertising on the Internet offers a comprehensive understanding of what factors clinics think patients value in their fertility care and the factors that clinics believe they can emphasize to draw patients to their clinics. Despite assumptions made in the past, success rates are not the only feature of fertility care that the clinics selling ART emphasize. Instead, clinics employ a variety of methods to entice consumers to come to them. The next section talks about the opposite effect of advertising—how the content of clinics' websites discourages certain groups of patients from seeking fertility care.

III. ACCESS TO ART

Access to ART by racial minorities has been a major concern of academics discussing ART. But, as Dorothy Roberts points out in an important essay, the

88. I. Glenn Cohen & Daniel L. Chen, *Trading-Off Reproductive Technology and Adoption: Does Subsidizing IVF Decrease Adoption Rates and Should It Matter?*, 95 MINN. L. REV. 485, 539–40 tbl.1 (2010). For a slightly different determination of which states mandate coverage, see Valarie Blake, *It's an ART not a Science: State-Mandated Insurance Coverage of Assisted Reproductive Technologies and Legal Implications for Gay and Unmarried Persons*, 12 MINN. J.L. SCI. & TECH. 651, 663–65 (2011).

89. Cohen & Chen, *supra* note 88, at 539–40 tbl.1.

problem is that “[e]vidence is hard to come by.”⁹⁰ This Part uses the data I obtained from fertility clinics’ websites to assess the barriers these groups face in accessing treatment. Websites can serve as a proxy for the cultural and organizational norms in fertility markets and for clinics’ actual practices,⁹¹ so the information presented about racial minorities offers some evidence concerning the current norms in fertility treatment.

Racial minorities face financial barriers to accessing ART in states that do not require insurance companies to cover ART because of the distribution of wealth among racial groups.⁹² But even in states with comprehensive insurance coverage mandated by law, African American and Hispanic women are underrepresented among those seeking fertility treatments.⁹³ The disparity between different groups’ participation in fertility treatments could be a result of a variety of factors that website information cannot readily evaluate, such as doctors steering minorities away from fertility treatments.⁹⁴

For other potential causes, however, clinic websites could be a source of information. Some scholars have suggested that minorities may experience a cultural or lingual disconnect from fertility doctors because so few endocrinologists are racial minorities or multilingual⁹⁵ or because images of infertility in popular culture do not reflect minority populations.⁹⁶ Past commentary has suggested that the picture of people experiencing infertility—figuratively and literally—is of white people.⁹⁷

90. Dorothy E. Roberts, *Race and the New Reproduction*, 47 HASTINGS L.J. 935, 949 (1996).

91. See Johnson, *supra* note 13, at 396.

92. See Khiara M. Bridges, *On the Commodification of the Black Female Body: The Critical Implications of The Alienability of Fetal Tissue*, 102 COLUM. L. REV. 123, 161–62 n.147 (2002); David Orentlicher, *Discrimination Out of Dismissiveness: The Example of Infertility*, 85 IND. L.J. 143, 181 (2010) (“When health-care insurance does not cover infertility treatments and couples (or individuals) must pay out of pocket, then the significant costs of these treatments mean that they tend to be reserved for wealthier, white couples who can pay for them out of personal resources.”).

93. Tarun Jain & Mark D. Hornstein, *Disparities in Access to Infertility Services in a State with Mandated Insurance Coverage*, 84 FERTILITY & STERILITY 221, 222 (2005).

94. Roberts, *supra* note 90, at 940.

95. Nanette R. Elster, *ART for the Masses? Racial and Ethnic Inequality in Assisted Reproductive Technologies*, 9 DEPAUL J. HEALTH CARE L. 719, 729 (2005) (“Differences in language and culture between infertility service providers and patients may be yet another obstacle . . .”).

96. Lisa Ikemoto has noted that procreative technology is nearly indistinguishable from the stories about its uses. Lisa C. Ikemoto, *The In/Fertile, the Too Fertile, and the Dysfertile*, 47 HASTINGS L.J. 1007, 1020 (1996). If the images of infertility are dominated by whites, this will affect the rate at which minorities seek treatment.

97. Elster, *supra* note 95, at 724 (“If one reads the newspaper, picks up a magazine or flips on the nightly news, or any talk show, for that matter, the infertile look to be white, middle to upper middle class couples or women, with relatively high levels of education.”); Dorothy E. Roberts, *The Genetic Tie*, 62 U. CHI. L. REV. 209, 210 (1995) (“In one sense my friend is right: the images that mark these controversies appear to have little to do with Black people and issues of race. The tragedy of a rosy-cheeked girl torn from the adoptive couple who spent years battling in court to keep her; the infertile suburban housewife’s agonizing attempts to become pregnant via in vitro fertilization; the blue-eyed, blonde-haired baby held

The first part of my assessment was to measure the literal images of fertility treatments presented on fertility clinic websites. For every website that had pictures of babies on the Home page, we coded the races of the babies.⁹⁸ Of the 294 websites that presented images of babies, 62.93% (n=185) presented pictures of only white babies, while 1.02% (n=3) presented images of only black babies, 0.34% (n=1) had an image of only a Latino baby, and 1.02% (n=3) had a picture of only an Asian baby. If we include instances where white babies appear along with babies of other races, 97.28% (n=286) of websites with pictures of babies have pictures of white babies.⁹⁹ The full results are presented in Table 5.

Table 5: Race of Babies on Clinics' Home Pages

Race of Baby	Percentage	Number (of 294)
White Only	62.93	185
Black Only	1.02	3
Latino Only	0.34	1
Asian Only	1.02	3
White and Black	8.16	24
White and Latino	4.76	14
White and Asian	5.10	15
Black and Asian	0.34	1
Three or More Races	16.33	48

The fact that most websites present images of white babies presents two different possible narratives. First, the fact that white babies appear with such a high frequency might explain some of the reason for the disparity in utilization rates for fertility care among races. As discussed in Part II, the principle of social proof, social psychologists contend, drives unconscious behavior. This principle works “most powerfully when we are observing the behavior of people just like us. It is the conduct of such people that gives us the greatest insight into what constitutes correct behavior for ourselves. Therefore we are more inclined to follow the lead of a similar individual than a dissimilar one.”¹⁰⁰ It is possible that pictures

up to television cameras as the precious product of a surrogacy arrangement; the complaint that there are not enough babies for all the middle-class couples who desperately want to adopt; the fate of orphaned frozen embryos whose wealthy progenitors died in an airplane crash—all seem far removed from most Black people's lives. Yet it is precisely their racial subtext that gives these images much of their emotional content. Ultimately, my attraction to the Baby Jessica case, and cases like it, stems from my interest in the devaluation of Black reproduction.” (emphasis omitted); Roberts, *supra* note 90, at 938 (pointing out a news story about reproduction that featured only pictures of white people having white babies).

98. Some websites scroll through different images or present different images each time a viewer clicks on the website or refreshes it. For these websites, we recorded the race of the babies that appeared the first time we went to the website or that automatically appeared without any additional clicks. We did not refresh the website to see if other races appeared because the race of the baby in those cases should be random, so recording an individual instance should not skew the results.

99. This figure assumes that websites with pictures of babies of three or more races all had pictures of white babies, which might be untrue but most likely is not based on the other websites.

100. CIALDINI, *supra* note 26, at 140.

of white babies give social proof to white individuals considering fertility care but not to people who are of other races, driving up the number of white patients and driving down the number of patients from other races.

The second narrative is more disturbing. It is possible that clinics are purposefully using the race of babies to draw in white patients, confirming the charge of some academics who argue that fertility treatments entrench racist norms.¹⁰¹ Social psychologists have found that advertisements are effective if people like the advertiser. People are most inclined to like people who are similar to them:

We like people who are similar to us. This fact seems to hold true whether the similarity is in the area of opinions, personality traits, background or life-style. Consequently, those who wish to be liked in order to increase our compliance can accomplish that purpose by appearing similar to us in any of a wide variety of ways.¹⁰²

Psychologists have also demonstrated that an association principle exists that allows one person to lend positive traits to another person, product, or service.¹⁰³ It is possible that clinics are exploiting these advertising principles by using images of white babies to create a halo effect for the clinic.

The second step I took to assess access to fertility care was to record how many clinics advertised that they were multilingual since this advertisement may increase access to non-English speakers and be a sign of welcome to minorities. Only 15.86% (n=59) of websites' Home and About pages advertised that the clinics offered services in multiple languages.

Finally, I counted the number of minority reproductive endocrinologists at clinics. Scholarship in the past has noted anecdotal evidence about the dearth of minority physicians, but it has also recognized that "empirical information [about the race of physicians] does not seem to be available with respect to reproductive endocrinologists."¹⁰⁴ We had no way to know with certainty the race of the endocrinologists by viewing the websites, but we made assessments based on pictures and last names. If we were unsure of the race, we did not code it. While this method certainly resulted in some errors, they are likely the same errors that other viewers of the webpages would make as well. We believed we could determine the races of 1124 reproductive endocrinologists on clinics' websites. Of

101. See Leslie Bender, *Genes, Parents, and Assisted Reproductive Technologies: ARTs, Mistakes, Sex, Race, & Law*, 12 COLUM. J. GENDER & L. 1, 64 (2003) (noting the critique of ART based on the fact the "use of these technologies reproduces the racist ideology in our society that values white babies and their physical features over children of color and their physical characteristics" and collecting sources making this claim).

102. CIALDINI, *supra* note 26, at 173.

103. *Id.* at 191 ("In one study, men who saw a new-car ad that included a seductive young woman model rated the *car* as faster, more appealing, more expensive-looking, and better designed than did men who viewed the same ad without the model." (emphasis in original) (citing George Horsley Smith & Rayme Engel, *Influence of a Female Model on Perceived Characteristics of an Automobile*, 3 PROC. 76TH ANN. CONVENTION AM. PSYCHOL. ASS'N 681 (1968))).

104. Elster, *supra* note 95, at 729.

those physicians, 79.89% were white, 2.14% were black, 4.27% were Latino, 8.27% were Asian, and 5.43% were of other races. Table 6 presents the information we recorded about their race.

Table 6: Races of Reproductive Endocrinologists Found on Clinics' Websites

Race	Percentage	Number (out of 1124)
White	79.89	898
Black	2.14	24
Latino	4.27	48
Asian	8.27	93
Another Race Outside of the Previous Categories	5.43	61

Like the images of babies, the percentage of black and Latino endocrinologists is lower than the distribution of these races in the general population according to the census, which is closer to 12.21% of the population being black or African American and 16.35% being Latino.¹⁰⁵

IV. THE INADEQUACY OF SELF-REGULATION TO POLICE FERTILITY CLINIC MARKETING

The final goal of the study was to understand the efficacy of the industry's attempts at self-regulation. Studying how fertility clinics present advertising information offers an opportunity to test theoretical claims about current self-regulation. Proponents and critics of self-regulation have offered a variety of general arguments for and against this form of regulation—for instance, that self-regulation is efficient because it is created by experts in the industry or, in contrast, that self-regulation is merely self-serving.¹⁰⁶ These arguments are not important merely because of their theoretical significance. Policymakers have held off on regulating the fertility business in part because of self-regulation,¹⁰⁷ so testing whether it is sufficient in the context of clinic advertising should have practical consequences for advertising policy and potentially other fertility policies.

Commentators have criticized the fertility industry's self-regulation because ASRM and SART have limited ability to police the industry. The only consequence of failing to follow the guidelines is to lose membership in the organization. This

105. See KAREN R. HUMES, NICHOLAS A. JONES & ROBERTO R. RAMIREZ, OVERVIEW OF RACE AND HISPANIC ORIGIN: 2010, at 4 (2011), available at <http://www.census.gov/prod/cen2010/briefs/c2010br-02.pdf>. The census data does not correspond with how we collected information because it separately asks what a person's race is and whether the person is of Hispanic origin. *Id.*

106. See Susan B. Apel, *Access to Assisted Reproductive Technologies*, 12 MICH. ST. J. MED. & L. 33, 45–46 (2008) (summarizing the arguments on both sides); Angela J. Campbell, *Self-Regulation and the Media*, 51 FED. COMM. L.J. 711, 715–17 (1999) (same).

107. Apel, *supra* note 106, at 37 (“[I]ndividual states have been slow to provide legislation. Reasons for this may include the real or perceived difficulty in legislating in areas where the relevant science is not easily understood, deference to physicians and the recognition that the practice of medicine has been largely self-regulating . . .”).

consequence is extremely rare¹⁰⁸ and possibly irrelevant to clinics that do not believe membership is critical to continuing their businesses¹⁰⁹ or that feel the liberty to not comply.¹¹⁰ In contexts other than advertising, critics assert that members of ASRM do not follow guidelines that set the number of embryos that should be transferred¹¹¹ or that prescribe how IVF refund programs should be presented.¹¹²

In the context of websites, several studies have demonstrated low levels of compliance with self-regulation. In 2005, Huang et al. conducted a study of fertility clinics' websites' compliance with guidelines from the American Medical Association about health information on the Internet.¹¹³ They found that "[i]rrespective of the practice setting or university affiliation, the overall quality of the fertility clinic websites is poor, failing to meet most of the AMA Internet health information guidelines."¹¹⁴ In 2007, Abusief et al. published a study of fertility clinics' compliance with the 2004 ASRM guidelines on advertising and concluded that a "significant proportion of SART-member fertility clinics, both private and academic, that have websites are not following the ASRM/SART guidelines for advertising."¹¹⁵

108. *Id.* at 41 (noting no clinics had been expelled as of the publication of the article in 2008). *But see* Radhika Rao, *How (Not) to Regulate ARTs: Lessons from Octomom*, 21 ALB. L.J. SCI. & TECH. 313, 319 (2011) (noting ASRM expelled one doctor for implanting an excessive number of embryos).

109. *See* Apel, *supra* note 106, at 41.

110. *See also* Velikonja, *supra* note 44, at 486 (2009) ("ASRM's self-regulatory powers are limited because its enforcement mechanisms are ineffective. Compliance with the infertility guidelines is largely voluntary, and ASRM has no way of punishing noncompliant clinics. . . . In addition, clinics do not have to be members of ASRM to offer infertility services and are hence not even loosely bound by ASRM's embryo transfer guidelines."). *See generally* 138 CONG. REC. H5349 (daily ed. June 29, 1992) (statement of Rep. Ron Wyden) ("The problem, however, is that any professional society can, at best, have a voluntary program. We know that perhaps 15 percent of the clinics, those that probably cause the most problems in terms of exploitation of families and the consumers, are the ones where couples are not getting voluntary success-rate information, and where we are not seeing them follow the sensible guidelines of the American Fertility Society. That is why it is time for government to step in and set some basic ground rules to protect consumers and families in this area."); Kimberly D. Krawiec, *Why We Should Ignore the "Octomom"*, 104 NW. U. L. REV. COLLOQUY 120, 121 (2009) ("Currently, decisions regarding the number of embryos to transfer and, ultimately, fetuses to carry to term, are left to patients and their doctors. Although the American Society for Reproductive Medicine (ASRM) and the Society for Assisted Reproductive Technology (SART) have issued practice guidelines in an effort to reduce the incidence of multiple births from ARTs, the guidelines are not mandatory and are customizable according to the conditions of the individual patient.").

111. *See* Rao, *supra* note 108, at 320 (citing evidence that fertility doctors admitted they would not follow embryo transfer guidelines in a variety of contexts).

112. Hawkins, *supra* note 81, at 124–27.

113. Huang et al., *supra* note 13, at 541.

114. *Id.*

115. Abusief et al., *supra* note 43, at 88. More specifically, they found that:

Success rates were published on 51% of fertility clinic websites (117 private, 31 academic), the majority of which were private clinics (p=.025). The percentage of fertility clinic websites adhering to ASRM/SART guidelines was low in all categories (ranging from 2.8% to 54.5% in private centers and 1.3% to 37.2% in academic centers). Fewer than half of all clinics publishing success rates (35.5% of private clinics and 21.8% of academic clinics, p=.037) provided information about the numerator and denominator used for calculation. Live-

Yet, despite criticisms, doctors continue to insist on self-regulation,¹¹⁶ and academic commentary offers support for self-regulation.¹¹⁷ Additionally, recent research suggests that the level of compliance with Internet guidelines may be increasing as the Internet becomes more prevalent in society and clinics respond to past studies that pointed out noncompliance.¹¹⁸ Thus, this study is an important continuing step in assessing the level of compliance with voluntary self-regulation.¹¹⁹

Some compliance with self-regulation can be assessed from data already discussed in this Article. For instance, the American Medical Association has set out what factors doctors should use to compete, including “quality of services, skill, experience, miscellaneous conveniences offered to patients, credit terms, fees charged, etc.”¹²⁰ In a similar vein, SART requires that “[c]laims made in advertising must be supported by verifiable published data.”¹²¹ Yet it is clear from the noncommunicative information presented on and the other attributes emphasized by clinic websites that many clinics are not complying with this norm.¹²²

birth data were reported on a minority of both private and academic clinics (p=.468). The ASRM/SART guideline-mandated disclaimer statement, “A comparison of success rates may not be meaningful because patient medical characteristics and treatment approaches may vary from clinic to clinic,” was present on only 65 clinic websites (43.9%) publishing success rates.

Id. at 90. A study of websites in Canada similarly found a high level of clinics not reporting live birth rates. M.P. Vélez, G. Abad, J.M. Robert, F. Bissonnette & I.J. Kadoch, *Quality Assessment of Fertility Clinic Websites in Canada: A Comprehensive Approach*, 26 HUMAN REPROD. 1337, 1337 (2011) (finding “26 (63%) clinics listed pregnancy success rates, while only 6 (15%) listed their live birth rates”).

116. There are many examples of doctors endorsing self-regulation, often in an attempt to deter governmental intervention. *See, e.g.*, Bryan D. Cowan, *Veracity in in Vitro Fertilization Web Pages*, 83 FERTILITY & STERILITY 548, 548–49 (2005) (“[P]rofessional organizations . . . should develop policies and procedures for Web-based information about IVF and require all IVF Web sponsors to comply.”); Yakov M. Epstein & Helene S. Rosenberg, *Assessing Infertility Information on the Internet: Challenges and Possible Solutions*, 83 FERTILITY & STERILITY 553, 555 (2005) (“The time is ripe for the ASRM, perhaps in partnership with consumer organizations such as RESOLVE, INCIID, and AFA, to launch a task force to study the problem of managing fertility information on the Internet and proposing useful solutions.”); Huang et al., *supra* note 13, at 543 (“More importantly, professional organizations governing the practice of ART should develop more specific guidelines”); Craig S. Niederberger, *Assisted Reproductive Technologies on the Web*, 83 FERTILITY & STERILITY 550 (2005) (“If we don’t heed Huang et al.’s clarion call to improve SART-affiliated websites, we might find regulators knocking at our virtual doors, or worse.”).

117. *See* Apel, *supra* note 106, at 49 (“Self-regulation within the medical profession is at the moment the most viable means of controlling access issues, leaving less need for legislation.”); *cf.* Naomi R. Cahn & Jennifer M. Collins, *Eight Is Enough*, 103 NW. U. L. REV. COLLOQUY 501, 508 (2009) (observing that “most reproductive endocrinologists follow [ASRM] standards”).

118. *See* Klitzman et al., *supra* note 25, at 1277 (noting that fertility clinics’ websites have changed their content).

119. *See* Jain & Barbieri, *supra* note 16, at 547 (“With clearly defined advertising parameters for fertility clinics set forth by the FTC and SART/ASRM, it would be of concern if clinics are continuing to violate them.”).

120. COUNCIL ON ETHICAL AND JUDICIAL AFFAIRS, AM. MED. ASSOC., CODE OF MEDICAL ETHICS OPINION 6.11 (1983).

121. SART Executive Council, *supra* note 49 (Policy #3).

122. *See supra* Part II.A.

The more important type of self-regulation that my study can inform, however, is the regulation of advertising that the SART Executive Council promulgated in 2009.¹²³ These regulations require, among other guidelines that I did not test:

- (1) “Advertising must comply with guidelines of the Federal Trade Commission,”¹²⁴ which require that clinics state the method for calculating their success rates;¹²⁵
- (2) “[t]he following statement must be included when quoting program statistics: ‘A comparison of clinic success rates may not be meaningful because patient medical characteristics, treatment approaches and entrance criteria for ART may vary from clinic to clinic.’”¹²⁶
- (3) “Because comparison of success rates between and among practices is invalid, using SART or CDC Clinic Specific Data for advertising/marketing that ranks or compares clinics or practices is unacceptable and is not permitted. This prohibition includes comparisons of outcomes of individual program(s) to any other program whether named or anonymous.”¹²⁷

Based on my assessment of fertility clinics’ websites, I found a low level of compliance with these guidelines. To test (1), compliance with the Federal Trade Commission’s requirement that clinic describe how they reached their success rates, we searched each clinic’s entire website to see if the website provided the method used to calculate success rates (if success rates were mentioned on the website). Of the 193 clinics that actually listed their success rates, 62.18% (n=120) stated the method the clinic used for arriving at its success rate, and 37.82% (n=73) failed to comply with this guideline.¹²⁸

To assess compliance with (2), the required statement accompanying program statistics, we noted instances where the websites’ Home and About pages used program statistics and looked on those pages for the required statement Program statistics were present on 15.09% (n=56) of the 372 Home and About pages we viewed, and of those pages, 71.43% (n=40) had the required statement while 28.57% (n=16) did not.

The most complicated assessment was (3), the requirement that clinics not compare the outcome of their programs with anything but national SART-generated averages. And this requirement is also very important because

123. SART Executive Council, *supra* note 49.

124. *Id.* (Policy #1).

125. Michael A. Katz, *Federal Trade Commission Staff Concerns with Assisted Reproductive Technology Advertising*, 64 *FERTILITY & STERILITY* 10, 11 (1995) (explaining that the commission’s “basic principles for advertising ART success rates” include the requirement that “if a comparison is made to other clinics’ success rates or to a national average, then the method of calculating the success rate must be the same”).

126. SART Executive Council, *supra* note 49 (Policy #5) (emphasis omitted).

127. *Id.* (Policy #4).

128. A reader might note that earlier I reported that 207 clinics used success rates to market their clinic, but here only 193 clinics are presented. *See supra* Table 1. Because some of the clinics that claim good success rates do not actually list their success rate, those clinics were not included in the 193 we evaluated.

comparisons strongly affect how we perceive reality,¹²⁹ and comparisons between the success rates at different clinics are very problematic.¹³⁰ To assess compliance with ASRM comparison guidelines, we recorded every time the Home or About pages compared the clinic's success rates to other groups. One hundred seventy-two clinics had comparison statements. I categorized the comparison statements of those clinics into three groups: statements that compared the clinic to national statistics, statements that compared the clinic to other groups of clinics beyond a national average (such as clinics in a particular region or clinics worldwide), and statements that used comparative language without specifying the entity to which the clinic was being compared.

Of the clinics making comparison statements, 34.30% (n=59) followed the ASRM guidelines and only made comparisons to national success rates.¹³¹ These comparisons often followed along this line: “[W]e are proud to report success rates

129. See CIALDINI, *supra* note 26, at 11–12 (“There is a principle in human perception, the contrast principle, that affects the way we see the difference between two things that are presented one after another. Simply put, if the second item is fairly different from the first, we will tend to see it as more different than it actually is.”).

130. Success rates can be reported using different numerators and different denominators. For instance, the numerator, or the successes being counted, could either be chemical pregnancies, clinical pregnancies (seven weeks gestation), ongoing pregnancies (gestation past the second trimester), or live births. See Eggen, *supra* note 44, at 649–50; *Success Rates*, BOCAFERTILITY, http://www.bocafertility.com/Success_Rates. These figures can be compared against the number of cycles initiated, cycles that resulted in eggs being retrieved, or cycles that resulted in an embryo being transferred as the denominator. *Success Rates*, BOCAFERTILITY, http://www.bocafertility.com/Success_Rates. The choice of the numerator and denominator yields radically different rates. As one clinic's website explains, “an IVF program can have relatively poor results with their medication protocols and/or fertilization rates yet have high success rates per embryo transfer.” *Id.* Even when two clinics use the same measure for the numerator and denominator, the success rates of the clinics are not comparable because some clinics “will exclude potential IVF patients who are unlikely to succeed, which will make them appear to have better success rates than those who accept everyone who comes to them for help.” *Id.*; see also Abusief et al., *supra* note 43, at 92 (“Inconsistencies in the type of success rate published within or between fertility clinic websites can potentially mislead patients about which rate applies to their situation. Furthermore, analyses of success rates may require expertise not commonly held by patients new to fertility treatment. Although some websites do include information about how to interpret success rates, many other clinics do not differentiate [between different situations].”); Goodwin, *supra* note 44, at 1727–32 (discussing problems associated with defining “success” for success rates). These concerns echo legal principles involving comparisons made by advertisers. See TUSHNET & GOLDMAN, *supra* note 23, at 306 (“With some exceptions, courts have largely accepted the argument that comparisons should be based on head-to-head testing, not on separate tests or studies. Different studies may select differing populations, methodologies, endpoints and other factors that make comparison difficult if not inherently misleading. . . . In addition, the ‘apples to apples’ principle requires fairness in definition—though the advertiser is generally free to choose the terms of its comparison, once those terms are chosen it must be consistent.”).

131. This finding tracks closely with a 2011 study of Canadian websites that found that “[t]welve (29%) clinics stated that their success rates were higher than the national mean.” Vélez et al., *supra* note 115, at 561.

well above the national average, making us a leader in the field of infertility treatment.”¹³²

Another 19.19% (n=33) of clinics making comparison statements violated the ASRM guidelines and compared the clinic’s success rates to other specific groups of clinics, sometimes in addition to national averages. Some websites claimed the clinic is the best in a region for success rates: “The Center’s good results have produced one of the highest and most consistent overall success rates for all infertility treatments in the region. The Center’s results for in-vitro-fertilization (IVF) also are one of the highest and most consistent success rates in the region.”¹³³ Other clinics make the comparison group broader than a national average, stating “[w]e are proud that our IVF success rates are among the best in the world.”¹³⁴ Still others defined their comparison group as academic programs and costly private programs¹³⁵ or other leading fertility clinics.¹³⁶

These statements appear to contradict the advertising guideline’s prohibition on “comparisons of outcomes of individual program(s) to any other program whether named or anonymous.”¹³⁷ Each of these groups—regional, worldwide, and university/costly programs—are anonymous programs to which the clinics are offering comparisons. As the ASRM guidelines note, “comparison of success rates between and among practices is invalid,”¹³⁸ so these comparisons should not be made on clinics’ websites under the guidelines.

Finally, 46.51% (n=80) of the websites making comparison statements did so without specifying the exact clinic or group of clinics to which they were being compared. Clinics’ websites claim that their success rates are superior,¹³⁹ exceptional,¹⁴⁰ incredibly high,¹⁴¹ among the best,¹⁴² or unprecedented.¹⁴³ These

132. Observation 9.

133. Observation 4. *See also* Observation 22 (“[W]e have a record of reliability, safety and success with even the most difficult cases that is unmatched by any other regional program.”); Observation 33 (“[The doctor] took over the former [clinic] in Orange County. While [the former clinic] enjoyed some of the highest pregnancy rates in all of Southern California, and certainly, Orange County, it wasn’t until [the doctor] successfully took over sole control of the laboratory that the bar was raised yet again, with regards to IVF success rates. . . . For the past 12 years, [the doctor] has had some of the highest IVF success rates in Southern California.”); Observation 94 (claiming “some of the highest success rates in the south Florida region”).

134. *E.g.*, Observation 207.

135. *E.g.*, Observation 243 (“We boast a level of success that is on par with sophisticated, university-based programs and more costly patient-oriented private centers.”).

136. *E.g.*, Observation 134 (noting the clinic’s success rates were not “unlike those from other leading centers”).

137. SART Executive Council, *supra* note 49 (Policy #4).

138. *Id.*

139. Observation 44 (boasting “superior pregnancy rates”); Observation 21 (“While upholding the highest standards of moral and ethical practices, we offer cutting edge and state-of-the-art technologies to achieve superior pregnancy rates.”).

140. Observation 144 (“We are the only practice in central Indiana to offer IVF in an office-based setting where comfort, safety, convenience, and exceptional pregnancy rates are obtained.”).

141. Observation 31.

142. Observation 170.

143. Observation 157 (claiming “unprecedented success rates for assisted reproduction”).

adjectives do not state a specific comparison, but each adjective only makes sense if it is seen in light of a comparison group. A clinic alone cannot be exceptional or superior, so these terms imply an anonymous comparison group, despite the prohibition on making comparisons to such groups. It is possible that this final type of comparison is insufficient to constitute a comparison because the competitor is not identified, as at least one case from advertising law has concluded.¹⁴⁴ But, I think it is highly likely ASRM's guidelines prohibit these generalized comparisons because the guidelines specifically forbid comparisons with anonymous competitors, so the guidelines, unlike the law, do not require that the competitor be identified.

On balance, the level of compliance with the advertising self-regulation is remarkably low. Regardless of the precise causes, clinics do not appear to feel constrained by ASRM's advertising guidelines. Contrary to the beliefs of legislators restraining from regulating ART because of self-regulation, self-regulation alone does not appear to be an adequate policing mechanism to ensure truthful advertising.

CONCLUSION

This Article offers the first global assessment of fertility clinic advertising that is presented on clinics' websites. It controverts some commonly held beliefs, such as the belief in the supremacy of success rates as the only decision point for consumers and the belief in academic clinics as path setters toward ethical conduct. It also confirms several suspicions and theoretical positions taken in earlier scholarship, such as the concern about access to ART by racial minorities and the concern about the ability of the industry to police its own conduct. Whether confronting or affirming prior convictions, this study has generated several conclusions that suggest the need for regulators—both those inside the industry and those outside it—to consider new regulations to ensure that the market functions correctly and that clinics do not mislead consumers or capitalize on decision-making biases.

First, as a general matter, I hope the study encourages policymakers to take greater interest in fertility clinic advertising. Because laws already address success rates and because the industry actively engages in self-regulation, policymakers may be lulled into a state of complaisance about the need for intervention to ensure fertility markets function efficiently. By demonstrating that both of these beliefs are highly questionable, I hope the study encourages policymakers to consider new approaches to regulating fertility clinic advertising.

144. See TUSHNET & GOLDMAN, *supra* note 23, at 306 (“Yet not all advertising claiming to provide ‘better’ or ‘stronger’ features is comparative. A competitor must be reasonably identifiable. One court refused to find that an ad referring to ‘most spill proof cups,’ with a picture of a cup that did not have any recognizable distinctiveness, compared the advertiser’s product with the leading competitor. See *Playtex Prods., Inc. v. Gerber Prods. Co.*, 981 F. Supp. 827 (S.D.N.Y. 1997). Particularly in a field with many contenders, such as analgesics, broad references to ‘better’ performance are unlikely to be deemed comparative without a more specific identification of the comparator.”).

More specifically, government regulators should consider requiring that clinics present general pricing information about their services in a uniform manner to enable patients to price shop between clinics.¹⁴⁵ In other complicated financial transactions, Congress has already required businesses to communicate pricing information in a uniform manner. For example, the Truth in Lending Act requires all lenders to present cost information about loans in the same way.¹⁴⁶ If websites listed prices in a uniform manner, patients would be able to assess at least that part of the decision with minimal transaction costs. One objection to my suggestion is that patients will just pick the fertility provider with the highest price because customers generally use price as a proxy for quality¹⁴⁷ and they especially are prone to do so for medical services.¹⁴⁸ However, given the evidence in the market of clinics emphasizing low prices, it appears clinics do not think patients gravitate towards high prices.

In addition, policymakers should consider whether the pervasive use of white babies in current advertising needs to be counteracted by regulation requiring clinics to incorporate babies of other races in their advertising. The Fair Housing Act allows courts, for instance, to order rental businesses who have engaged in discrimination to integrate different races into their advertising: “[F]ederal courts and commentators have recognized, at least in the context of discriminatory rentals, that affirmative action injunctions are not only appropriate, but necessary.”¹⁴⁹ Commentary in that context has argued that affirmative requirements that advertisers include racial minorities “can (1) change the process of all-white-model real estate advertising by interrupting the exclusion of minority models and (2) adjust for the effects of long-term discrimination by reaching out to previously excluded readers.”¹⁵⁰ In the same way, policymakers should consider whether similar provisions should exist for fertility clinics that use babies in their advertising.

Second, the industry should respond. Other practices that clinics are currently engaging in are not well suited for governmental intervention. Members of the industry, however, could take steps to eliminate them. For instance, clinics’ use of

145. Cf. Sage, *supra* note 50, at 1741 (suggesting standardization as one means of mitigating problems communicating information to individual healthcare consumers).

146. 15 U.S.C. § 1601 (2012).

147. TUSHNET & GOLDMAN, *supra* note 23, at 30 (“These results are consistent with earlier research finding that consumers often believe and judge lower priced items to be of lower quality, even though objective testing (for example, done by Consumer Reports) often finds no quality differences or advantages for the lower-priced versions.”).

148. Schneider & Hall, *supra* note 60, at 26 (“Even were the Internet widely used, how consumerist would the results be? ‘Many have argued that patients using the Web to find providers will finally bring price-sensitivity to health care consumption The exact opposite is more likely to occur Not only will people never seek the lowest bidder when it comes to their own physical and emotional well-being; they will actively seek out and select the highest bidder, presuming (usually correctly) that higher cost connotes higher quality’”) (quoting J.D. Kleinke, *Vaporware.com: The Failed Promise of the Health Care Internet*, 19 HEALTH AFF. 57, 67 (2000)).

149. Katherine G. Stearns, *Countering Implicit Discrimination in Real Estate Advertisements: A Call for the Issuance of Human Model Injunctions*, 88 NW. U. L. REV. 1200, 1232 (1994).

150. *Id.* at 1234.

the words “dream” and “miracle” and posting of baby pictures may mislead consumers to associate treatment at the clinic with success. Lawmakers, however, would have a difficult time intervening to stop this behavior because these terms and practices are plainly puffery.¹⁵¹ ASRM, however, could specifically discourage member clinics from using such tactics by prohibiting this behavior in its advertising guidelines.

Also, ASRM could act in places where political pressure prevents policymakers from acting. For example, ASRM could address access to ART by racial minorities. ASRM could create concrete requirements for its member clinics to follow, such as a requirement to use babies of multiple races if pictures of babies are present on a website. The data on self-regulation suggest these attempts to self-regulate may fail for some clinics, but given the political and practical problems of the government acting, self-regulation could provide a second-best option.

Finally, academic clinics should consider whether they are fulfilling their teaching mission in their advertising techniques. Because so many reproductive endocrinologists interact with these clinics, they have an opportunity to encourage ethical advertising that enhances competition within the fertility industry. Yet, the study in this Article found that academic clinics are not at the forefront in ethical advertising, suggesting a need for academic clinics to revise their practices.

As more of the population turns to the Internet to access information about health, fertility clinic websites are likely to play an increasingly prominent role in how patients pick their clinic. This Article has argued that regulators within and outside the industry have missed some salient data points that consumers consider when picking a clinic. More needs to be done to encourage truthful advertising and to increase access to ART, and the government and the industry both have a role to play in encouraging responsible practices.

151. See David A. Hoffman, *The Best Puffery Article Ever*, 91 IOWA L. REV. 1395, 1397 (2006) (explaining that, under the conventional view, puffery involves statements that are too vague to evaluate and thus are immune from suit); TUSHNET & GOLDMAN, *supra* note 23, at 168 (“Vague superlatives such as ‘best,’ ‘finest,’ ‘brightest,’ ‘most delicious,’ and the like are so common that reasonable consumers are presumed to treat them as unverifiable, unquantifiable, subjective, and unreliable.”).