BEYOND THE SCALE: NAVIGATING BMI, IVF CANDIDACY, AND RETRIEVAL SETTINGS THROUGH PROVIDER PERSPECTIVES

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Background:

Obesity is associated with anovulation, infertility, and a higher risk of morbidity in pregnancy.[1] 2019 CDC data identifies 29% of women with a pre-pregnancy BMI (body mass index) consistent with obesity (BMI ≥ 30).[2] It has previously been demonstrated that obese women have variable access to fertility services. A 2014 survey of fertility providers demonstrated an average BMI cutoff for IVF access of 38 or less, and 2019 data revealed that more than two-thirds of providers utilized a BMI cutoff.[3,4] Previous reports also describe IVF protocols for obese women with retrievals that are conducted in a hospital setting, given increased anesthesia needs.[5,6] However, it is unknown how frequently hospital-based retrievals are implemented across the nation, due to variable protocols, resources, and institutional policies.

Objective:

To assess how obese women interface with fertility services, we sought to identify provider-level differences in both the interpretation of BMI in IVF candidacy and in utilization of protocols that may increase access for patients with high BMI.

Materials & Methods:

A cross-sectional survey was sent to all current SREI members (*n=827*). The survey included sixteen questions about physician practice characteristics and the role of BMI in determining candidacy for IVF and retrieval settings. Statistical analyses assessed whether practice setting, or geographic region had effects on the use of BMI cutoffs or practice of hospital retrievals. Descriptive statistics, X^2, Fisher's exact, and logistic regression analyses were utilized, as appropriate.

Results:

A total of 182 responses were received from diverse REI practices across the USA (22% response rate). Overall, 98% of providers report turning away at least one patient, in the past year, due to BMI. 89% of respondents routinely implement a BMI cutoff at their clinic. The implementation of BMI cutoffs was not significantly different by setting (academically-affiliated vs private) or region. The most common BMI cutoff range was 40-44. Less than 1% use a limit of BMI 30, with 15% of providers at the opposite end of the spectrum with a limit of BMI 50**.** Among those who have a BMI cutoff, 95% cited anesthesia requirements as the reason for the cutoff. Only 10% of participants perform hospital retrievals, with lack of access to a mobile embryology lab (57%), patient cost (42%), and scheduling difficulties (57%) as common barriers. Providers

in an academically-affiliated setting were more likely to perform hospital OR retrievals (16% v 0%, P<0.001).

Conclusions:

Obese women have limited access to IVF services, with almost every REI surveyed saying they had excluded a patient due to obesity, in the past year. The largest concern from providers is related to surgical and anesthetic safety. However, very few providers have access to retrievals in a hospital setting, which could theoretically mitigate these safety concerns. More research is needed to demonstrate and promote safe protocols for retrievals in obese women.

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