

Evidence-Based Clinical Decision Making: A Framework to Guide Clinical Practice (Exemplar: Preconception Counseling)

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The editorial team of *Diabetes Spectrum* is excited to introduce in this issue a new title and format for our “Clinical Decision Making” department. Articles in this section of the journal present real patient cases illustrating specific points in the care of individuals with diabetes. Starting with this issue, these case studies will appear under the title “Evidence-Based Clinical Decision Making” and will be presented using an evidence-based practice (EBP) framework similar to what clinicians use for practice.¹

The EBP framework requires a clinical question presented with the “PICO” components (population, intervention, comparison, and outcome); a description of the search strategy for the integrative review; a summary of the critical appraisal; and a collective evaluation of the scientific and medical evidence using the American Diabetes Association (ADA) evidence grading system for clinical practice recommendations.² The EBP approach to clinical decision making enhances the case presentation, validates the topic discussion, and evaluates the level of evidence for the recommendations.

We are especially pleased that the topic of our first installment of this revamped department is “Preconception Counseling and Type 2 Diabetes” (p. 117) because this topic is so well suited to our new format. With a clear clinical question that lends itself to a focused integrative review, it provides a good example of how the new format will work. In this case, the clinical question is: In women with type 2 diabetes, how effective is preconception counseling in improving clinical out-

comes? The PICO components are as follows:

- P (population) = women with type 2 diabetes who are of childbearing age
- I (intervention) = preconception counseling
- C (comparison) = patients who did and did not receive preconception counseling
- O (outcome) = better metabolic control, fewer pregnancy complications, and healthier babies

Most studies that have compared outcomes of women who received preconception counseling with those who did not receive such intervention were conducted in women with type 1 diabetes. However, seven studies were identified that included women with type 2 diabetes. Author Julie M. Slocum, RN, MS, CDE, found that only one of the seven focused solely on type 2 diabetes; most of the seven studies were well-conducted cohort studies. Although the author of that study indicated that preconception counseling had positive effects on many outcomes, she concluded because of some conflicting evidence that the weight of the evidence was supported by established clinical recommendations.

Clearly, this area is under investigation and could benefit from further research. Furthermore, although preconception counseling is mentioned in the ADA position statement “Standards of Medical Care in Diabetes,”³ the ADA’s complete “established” clinical practice recommendations on preconception counseling and care⁴ have not been updated since 2004. It is imperative that guidelines such as these remain

current. It is also the responsibility of health professionals to stay abreast of the most recent recommendations.

Clinical trials have shown that preconception counseling can improve metabolic control and outcomes in infants of women with diabetes.⁵ Starting at puberty, preconception counseling should be included in every routine diabetes clinic visit for all women of childbearing potential.^{6,7} Developmentally appropriate information should be given incrementally with regular reminders (boosters) throughout a woman’s fertile reproductive life cycle. Although some women may receive initial preconception counseling, follow-up and routine reminders are just as important.

For women who are imminently planning a pregnancy and receiving preconception care, caution must be taken by both the women with diabetes and their health professionals to avoid burnout, which is described as a condition caused by prolonged living with unrelieved stress.⁸ The demands placed on women with diabetes and their health care team to attain and maintain euglycemia for an indefinite amount of time (until she conceives and throughout the pregnancy) can be very stressful for women and their support networks.

By raising preconception counseling awareness and associated issues for both women with diabetes and health professionals, barriers such as lack of follow-up and burnout can be avoided. As health professionals, it is our responsibility to provide women with diabetes the most up-to-date evidence-based recommendations for preconception counseling

to increase their chances of having a healthy pregnancy and a healthy baby.

References

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