Addressing potential pitfalls of reproductive life planning with patient-centered counseling

Lisa S. Callegari, MD, MPH; Abigail R. A. Aiken, MD, MPH, PhD; Christine Dehlendorf, MD, MS; Patty Cason, MS, FNP-BC; Sonya Borrero, MD, MS

Engaging women in discussions about reproductive goals in health care settings is increasingly recognized as an important public health strategy to reduce unintended pregnancy and improve pregnancy outcomes. "Reproductive life planning" has gained visibility as a framework for these discussions, endorsed by public health and professional organizations and integrated into practice guidelines. However, women's health advocates and researchers have voiced the concern that aspects of the reproductive life planning framework may have the unintended consequence of alienating rather than empowering some women. This concern is based on evidence indicating that women may not hold clear intentions regarding pregnancy timing and may have complex feelings about achieving or avoiding pregnancy, which in turn may make defining a reproductive life plan challenging or less meaningful. We examine potential pitfalls of reproductive life planning counseling and, based on available evidence, offer suggestions for a patient-centered approach to counseling, including building open and trusting relationships with patients, asking open-ended questions, and prioritizing information delivery based on patient preferences. Research is needed to ensure that efforts to engage women in conversations about their reproductive goals are effective in both achieving public health objectives and empowering individual women to achieve the reproductive lives they desire.

Key words: family planning, One Key Question, PATH questions, patient-centered care, patient-centered counseling, preconception care, pregnancy planning, reproductive autonomy, reproductive goals counseling, reproductive life plan, reproductive life planning

In a recently released opinion, the American Congress of Obstetricians and Gynecologists (ACOG) joined a growing number of health care organizations in advocating for "reproductive life planning" in health care settings.[1] Reproductive life planning is a counseling strategy in which women are encouraged to proactively identify their reproductive goals and make a reproductive life plan. Introduced in 2006 by the US Centers for Disease Control and Prevention (CDC) as part of a broader public health effort to improve preconception health,[2,3] reproductive life planning has since been integrated into practice guidelines for Title X reproductive health clinics[4] and included as a component of the Quality Family Planning Guidelines jointly published by CDC and the Office of Population Affairs.[5]

The public health rationale for reproductive life planning is derived from national health statistics indicating poorer outcomes for women and infants in the US compared to other industrialized nations,[2] including declining but persistently high rates of unintended pregnancy[6] as well as high rates of maternal and perinatal morbidity and mortality.[7-10] Although data on the effect of reproductive life planning on health outcomes are sparse,[11,12] the hope is that these conversations will reduce unintended pregnancy by improving contraceptive use and reduce adverse maternal and perinatal outcomes by

From the Departments of Obstetrics and Gynecology and Health Services, University of Washington Schools of Medicine and Public Health, Seattle, WA (Dr Callegari); Health Services Research and Development, Puget Sound Health Care System, Department of Veterans Affairs, Seattle, WA (Dr Callegari); Lyndon B. Johnson School of Public Affairs, University of Texas at Austin, Austin, TX (Dr Aiken); Departments of Family and Community Medicine, Obstetrics, Gynecology, and Reproductive Sciences, and Epidemiology and Biostatistics, University of California San Francisco, San Francisco, CA (Dr Dehlendorf); School of Nursing, University of California Los Angeles, Los Angeles, CA (Ms Cason); Center for Research on Health Care, University of Pittsburgh, Pittsburgh, PA (Dr Borrero); and Center for Health Equity, Research, and Promotion, Department of Veterans Affairs Pittsburgh Healthcare System, Pittsburgh, PA (Dr Borrero).

Received July 8, 2016; revised Sept. 25, 2016; accepted Oct. 3, 2016.

L.S.C. was supported by a Department of Veterans Affairs (VA) Health Services Research and Development Career Development award (14-412). A.R.A.A. was supported by an infrastructure grant for population research from the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD) of the National Institutes of Health (NIH) (P2CHD047879). C.D. was supported by National Institute on Minority Health and Health Disparities of the NIH award number P60MD006902. S.B. was supported by 1R21HD076327-01A1 from the NICHD. The views expressed in this article are those of the authors and do not necessarily reflect the position or policy of the VA.

P.C. serves on advisory boards or as a consultant for Teva Pharmaceuticals (ParaGard), Allergan (Liletta), Medicines 360 (Liletta), Bayer AG (Mirena, Skyla, and intrauterine device in development), ContraMed (intrauterine device in development), and Evofem (spermicide in development). She is a trainer and speaker for Merck (Nexplanon, NuvaRing), Allergan (Liletta), and Medicines 360 (Liletta). The remaining authors report no conflicts of interest.

Corresponding author: Lisa S. Callegari, MD, MPH. lcallega@uw.edu

0002-9378/$36.00 • Published by Elsevier Inc. • http://dx.doi.org/10.1016/j.ajog.2016.10.004

helping women to address health concerns before conception.[2]

Women's health advocates and researchers, however, have voiced concerns about the potential for reproductive life planning counseling to have the unintended effect of alienating rather than empowering some women.[13-15] These concerns are based on research suggesting that planning pregnancy may not be a meaningful or attainable goal for some women[16,17] and that pregnancy intentions exist on a spectrum, with many women holding complex and conflicting feelings about pregnancy that could make the process of defining a reproductive life plan challenging.[18-20] Indeed, preliminary qualitative data on the acceptability of reproductive life planning suggest that, while women value conversations about their reproductive goals, their preferences for information vary based on their intentions and feelings about future pregnancy.[21] For example, women without clear desires for future pregnancy may not be open to receiving information about preconception health or to defining a plan for their reproductive futures.

The evolving national discussion about reproductive life planning acknowledges the potential limitations of a narrowly interpreted reproductive life planning framework, as evidenced by online resources recognizing that women may be ambivalent or unsure of their pregnancy intentions and that longer term or "life" planning may not always be a realistic or meaningful goal.[22,23] Building on this discussion, we explore the evidence underlying concerns about limitations of the framework and propose an expanded approach to accommodate the range of women's diverse goals and needs using principles of patient-centered care.

Potential Pitfalls of Reproductive Life Planning

In published guidance regarding reproductive life planning, providers encourage women to actively consider whether and when they intend to pursue pregnancy, and then promote effective contraceptive methods among women who do not desire pregnancy and offer preconception counseling to women who desire pregnancy.[1,3,22,24] While it is emphasized that women will move between categories over time[3] and more recent materials acknowledge that women may be unsure about their intentions,[22] the assumption is generally that women with unclear or ambivalent feelings about pregnancy should be encouraged to form a clear intention to either pursue or avoid pregnancy.[22]

Researchers in social science and medicine have long challenged the assumption that pregnancy intention is dichotomous and have suggested that, instead, it is a continuum shaped by a complex set of personal, social, and cultural factors.[18,19] While many women may have clear intentions to pursue or prevent pregnancy at a given time, studies indicate that as many as 30% of women express pregnancy intentions in the middle of the spectrum, often termed "ambivalence."[25,26] Many women perceive both negative and positive consequences of pregnancy and childbearing, which can result in complex or mixed feelings toward a potential pregnancy[16,27] that cannot necessarily be resolved with counseling.

This potential mismatch between a focus on dichotomous intention and a woman's own perspectives regarding future pregnancy could negatively impact the provider-patient relationship and interfere with her ability to get the care she needs. For example, a woman who is not actively seeking pregnancy but is open to an unplanned pregnancy might welcome counseling about how to prepare for a healthy pregnancy. If counseling does not elicit the complexity of her feelings about pregnancy, an opportunity to offer preconception counseling might be missed. Furthermore, counseling that does not elicit a woman's positive orientation toward a potential unplanned pregnancy might result in lack of understanding or judgment by providers of her decision to choose a less effective contraceptive method.

Another potential challenge arises from evidence that "pregnancy planning" may not be a meaningful concept to all women.[16,28,29] This may derive from a woman's general orientation toward planning behaviors or from specific attitudes toward pregnancy and childbearing influenced by cultural, economic, religious, or relationship factors. For example, qualitative studies have shown that some women hold beliefs about religion or fate that lead them to prefer a more passive or less constrained approach to pregnancy, while others perceive drawbacks of active planning such as the disappointment or stress involved with delayed conception.[16,28]

Studies have also demonstrated that some low-income women do not view pregnancy planning as an achievable goal in the context of their lives.[16,28,30] This stems from the fact that the socially acceptable conditions for planning a pregnancy, such as relationship and financial security, may be unattainable for them.[16,28,30] Allowing a pregnancy to "just happen" may therefore be perceived by women as more socially acceptable than planning a pregnancy in nonideal circumstances.[16] Although the reproductive life planning framework does not prescribe normative social or economic requirements for planning, providers may incorporate these factors into counseling in a "parental style of authority."[14,31] An unintended consequence of this may be that women may experience shame for reproductive choices that lie outside of social norms or feel that judgment on the part of the provider undermines their reproductive autonomy.[14,31]

Finally, a key objective of reproductive life planning is to facilitate counseling about modifiable preconception health risks at every visit, with the goal of promoting behaviors that lead to healthier pregnancies.[2] Preconception health counseling has the potential to empower women with information, skills, and resources to improve their health in anticipation of a pregnancy. However, evidence suggests that preconception counseling may feel less relevant to women who have no short-term desires for childbearing or are uncertain about their long-term pregnancy goals.[21,32] Preconception counseling in situations where a woman is not seeking or considering pregnancy could thus be perceived as prioritizing her health as a

potential mother or the health of a theoretical fetus over her health as an individual.[13]

A Patient-centered Approach

Discussing pregnancy desires, feelings, and goals in health care settings has the potential to empower women to make informed decisions about their reproductive lives. However, as discussed, the reproductive life planning framework as narrowly applied carries inherent risks, including the risk that providers will overlook critical dimensions of women's thoughts and feeling about pregnancy and alienate women who do not conform to normative expectations about when and under what circumstances pregnancy should occur.

A first step toward addressing these potential pitfalls is to focus on patient-centered communication (Table 1). Patient-centered care has been increasingly recognized as a critical component of quality health care.[33] Patient-centered counseling aims to provide education to patients that integrates evidence-based recommendations with patient preferences, recognizing that patients' individual values and preferences should be an integral factor in decisions made about their health care.[34] Achieving this goal requires building partnerships with patients, where patients function as experts on their preferences and needs and providers function as experts on the medical evidence.

With its prioritization of patient preferences and inherent respect for the diversity of patients' goals and experiences, the patient-centered care framework provides insight for how to expand the reproductive life planning framework to accommodate the full range of attitudes toward pregnancy. Underscoring the importance of patient-centered care in counseling about reproductive goals, ACOG's recent committee opinion on reproductive life planning included a recommendation for respectful counseling that elicits patients' values and preferences.[1]

Several small qualitative studies have examined women's preferences for counseling related to reproductive desires and goals, and can provide preliminary insights for provider-patient communication in this area. First, studies highlight that women value a comfortable, trusting relationship with providers when discussing pregnancy intentions or goals and prefer counseling that is nonjudgmental.[21,35] Second, women appreciate when providers initiate discussions about pregnancy goals in clinic visits, as they may be reluctant to raise the issue themselves.[21,36] Third, women express a desire for providers to elicit their individual values and preferences and deliver information and counseling in a manner that addresses issues that are relevant to them.[21]

Investigation into women's preferences related to preconception health counseling specifically indicates that women generally prefer an approach that emphasizes promoting healthy pregnancies rather than one that provokes fear of adverse pregnancy outcomes.[32] Several studies found that women with chronic conditions, such as diabetes, may experience stress and fear about their ability to adhere to prepregnancy recommendations and thus prevent pregnancy complications, suggesting a need for supportive counseling that builds self-efficacy.[35,37]

TABLE 1
Potential pitfalls and patient-centered alternatives in reproductive goals counseling

Potential pitfalls	Patient-centered alternatives
Assuming all women will have a binary intention to either pursue or avoid pregnancy.	Asking open-ended questions that allow women to express ambivalent or mixed feelings about pregnancy.
Assuming that all ambivalence can and should be resolved.	Working collaboratively with women to identify strategies that meet their needs in the setting of ambivalence (ie, preparation for possibility of pregnancy).
Assuming that women will perceive unintended pregnancy as a universally "bad" outcome.	Recognizing that some women who do not have an active intention to pursue pregnancy may welcome unintended pregnancy.
Assuming that "pregnancy planning" is a concept that all women find meaningful and relevant.	Recognizing that some women may not value planning, or may feel that planning is not attainable due to their life circumstances (ie, lack of financial or relationship stability).
Allowing personal judgment of women's reproductive desires or goals to influence counseling.	Providing nonjudgmental counseling and support, which respects women's reproductive autonomy.
Assuming all women who could potentially become pregnant will be receptive to preconception counseling.	Tailoring information delivery to women's preferences and needs, based on open conversations about reproductive goals.

Callegari. Avoiding pitfalls of reproductive life planning. Am J Obstet Gynecol 2017.

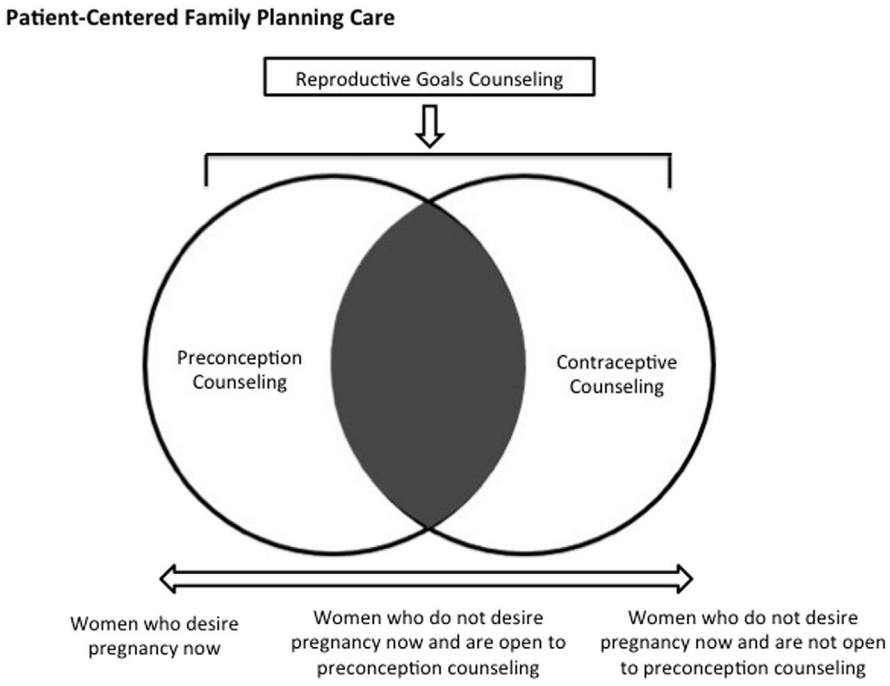
Implications for Practice

Drawing on the literature summarized above, in addition to published literature about patient-centered counseling related to contraception,[15] we suggest an approach that we term "patient-centered reproductive goals counseling." Figure depicts the relationships between patient-centered reproductive goals counseling and subsequent preconception and/or contraceptive counseling, within the broader framework of patient-centered family planning care. We propose the following 3 key components of patient-centered reproductive goals counseling.

Investing in developing quality interpersonal relationships with patients

We suggest that counseling should ideally be conducted in the context of an open, trusting, and caring interpersonal

FIGURE
Model of patient-centered reproductive goals counseling in practice



Callegari. Avoiding pitfalls of reproductive life planning. Am J Obstet Gynecol 2017.

dynamic with the patient. Discussions about issues as deeply personal as reproductive goals require particular attention to the development of the therapeutic relationship, and recent findings in contraceptive care have highlighted the importance of rapport in optimizing women's reproductive outcomes.[38] Development of this relationship requires careful attention to providers' own beliefs about social norms and avoidance of judgment in counseling; this can ensure women feel able to express their honest feelings about their reproductive hopes and goals and empowered to make autonomous decisions about their reproductive health.

Evidence-based recommendations by providers about pregnancy based on a woman's health or medical conditions are also an important component of patient-centered reproductive goals counseling. Use of a shared decision-making approach, where providers contribute expertise on medical evidence and patients contribute expertise on their values and preferences, can help ensure women make informed decisions about pregnancy timing. For medical conditions where behavior change is medically indicated to optimize health before a possible pregnancy, motivational interviewing is a patient-centered strategy in which providers offer more directive counseling while exploring patients' individual interest in and motivation for changing behavior.[39] A blended approach that combines shared decision-making and motivational interviewing is often appropriate in real-world clinical situations where behavior change in indicated (ie, weight loss) and decisions must be made about the best strategy to accomplish the desired change (ie, weight loss program, medication, bariatric surgery).[40]

Using patient-centered questions

We suggest that counseling employ questions that are framed in an open-ended manner to elicit patients' perspectives related to pregnancy planning, timing, and goals. For many women, providers will need to move beyond eliciting binary intentions to a more nuanced exploration of preferences, desires, and feelings, including the strength of their desires to achieve or avoid pregnancy as well as their feelings about a potential pregnancy. Open-ended questioning can also accommodate additional needs related to pregnancy and parenthood, including adoption or assisted reproduction for women with infertility or in same-sex relationships.

Various questions have been proposed to initiate discussions about reproductive goals (Table 2).[5,41] In 2006, the CDC recommended initiating discussions about reproductive life plans by asking women a series of questions, including whether they would like (more) children in their lives and, if so, how many children and when.[2] Although studies among women with chronic disease[11] and college students[42] suggested overall acceptability of this approach, a recent study of 250 low-income women in Los Angeles found these questions had limited utility as many women felt uncertain about the number of children they desired and when they desired children in their lifetimes.[43]

One Key Question (OKQ), developed by the Oregon Foundation for Reproductive Health, asks women about a shorter time frame: "Would you like to become pregnant in the next year?" (Table 2).[41] Online guidance for using OKQ emphasizes that women's intentions and feelings about pregnancy can be complex and recognizes that women will often be unsure or "OK either way."[23] When operationalized as intended, therefore, OKQ has the potential to be a patient-centered tool, and its simplicity has significant pragmatic advantages given limited time in clinical settings. However, as the question itself is framed to elicit a yes or no response and focused on a defined (1-year) rather than open time frame, there is a risk that stand-alone use of OKQ may not always promote patient-centered communication.

We suggest considering an alternate set of 3 questions, the PATH questions (Pregnancy Attitudes, Timing, and How important is pregnancy prevention),

which are framed to allow women to have varying certainty about reproductive intentions and to discuss their goals in the time frame most relevant to them (Table 2). The first question is phrased in an open-ended manner to assess future childbearing intentions as well as feelings about pregnancy and its potential impact on their lives: "Do you think you might like to have (more) children at some point?" If women are considering future parenthood, a follow-up question assesses thoughts on timing: "When do you think that might be?" Lastly, the question "How important is it to you to prevent pregnancy (until then)?" can elicit a woman's orientation toward a potential unintended pregnancy and provide context for her views on importance of contraceptive efficacy and her contraceptive choices.

One potential downside of an open-ended approach (either the PATH questions or the recommended implementation approach for OKQ) is the time required to engage in meaningful discussions, particularly when women are ambivalent about their pregnancy desires. Importantly, however, counseling need not attempt to resolve ambiguity or address all issues that arise in one visit; rather, counseling can identify concrete steps when appropriate to help women move toward their goals and create an agenda for future visits. Open-ended counseling may also uncover social, economic, and relationship concerns related to reproductive hopes and goals, such as relationship violence or unstable housing. This underscores the importance of innovative models of care, such as the patient-centered medical home, that utilize other members of health care teams to address nonmedical dimensions of health and reduce the burden on busy providers.[44,45]

Comparative research is needed to evaluate the effectiveness of these various approaches to reproductive goals counseling (Table 2). Until additional data are available, we suggest that providers explore different approaches in their practice to identify strategies that both accommodate the diversity of their patients' needs and are feasible in real-world clinical settings.

TABLE 2
Approaches to initiating reproductive goals counseling discussions

Approach	Questions
Reproductive Life Plan[2]	1. Do you have any children now? 2. Do you want to have (more) children? 3. How many (more) children would you like to have and when?
One Key Question[21]	Would you like to become pregnant in the next year?
PATH questions	
Pregnancy Attitudes	1. Do you think you might like to have (more) children at some point?
Timing	2. If women are considering future parenthood: When do you think that might be?
How important is prevention	3. How important is it to you to prevent pregnancy (until then)?

Callegari. Avoiding pitfalls of reproductive life planning. Am J Obstet Gynecol 2017.

Tailoring counseling based on values and preferences

We recommend that reproductive goals counseling prioritize relevant information according to women's values, preferences, and needs. For some women with clear pregnancy intentions or desires, creation of a reproductive life plan may be helpful and empowering. An emphasis on structured life planning, however, may not be meaningful for women who express ambiguity or conflicting feelings about future pregnancy. Here, a nuanced approach that sets the stage for a combination of preconception and contraception counseling will be needed based on assessment of individual women's perspective and needs. For example, providers can assess a woman's readiness to receive information about prepregnancy heath by asking "Are you interested in talking about ways to prepare for a healthy pregnancy?" as some women who are considering future pregnancy or have mixed feelings may be open to the information while others may not. While preconception counseling may be most relevant to those women who are considering future pregnancy, this counseling can be offered to all women in a patient-centered manner, given that unintended pregnancy is common and that women's feelings about pregnancy may change. For women who do not find preconception health counseling helpful, providers can employ broad encouraging and empowering messages about women's preventive health and leave the door open for future conversations if their needs change over time.

Conclusion

Family planning counseling and care that is first and foremost patient centered has the potential to promote healthy outcomes for women and families while supporting and protecting reproductive autonomy. An ongoing critical discussion about how to incorporate patient-centered counseling into discussions about reproductive goals will be important as providers and health systems attempt to operationalize these concepts. Additional work is needed to explore and test the components of patient-centered approaches to counseling about reproductive goals to ensure effectiveness in achieving inclusive, high-quality care that accommodates women's diverse perspectives and needs. We can then move toward solutions that promote public health while simultaneously empowering individual women to achieve the reproductive lives they desire. ■

REFERENCES

1. American College of Obstetricians and Gynecologists' Committee on Health Care for Underserved Women. Reproductive life planning to reduce unintended pregnancy.

Committee opinion no. 654. Obstet Gynecol 2016;127:e66-9.
2. Johnson K, Posner SF, Biermann J, et al. Recommendations to improve preconception health and health care—United States. A report of the CDC/ATSDR preconception care work group and the select panel on preconception care. MMWR Recomm Rep 2006;55:1-23.
3. Centers for Disease Control and Prevention. Preconception health and health care: reproductive life plan tool for health professionals. Available at: http://www.cdc.gov/preconception/documents/rlphealthproviders.pdf. Accessed September 25, 2016.
4. Preconception Health and Reproductive Life Plan. Office of Population Affairs. Available at: http://www.hhs.gov/opa/title-x-family-planning/initiatives-and-resources/preconception-reproductive-life-plan/. Accessed September 25, 2016.
5. Gavin L, Moskosky S, Carter M, et al. Providing quality family planning services: recommendations of CDC and the US Office of Population Affairs. MMWR Recomm Rep 2014;63:1-54.
6. Finer LB, Zolna MR. Declines in unintended pregnancy in the United States, 2008-2011. N Engl J Med 2016;374:843-52.
7. Berg CJ, Callaghan WM, Syverson C, Henderson Z. Pregnancy-related mortality in the United States, 1998 to 2005. Obstet Gynecol 2010;116:1302-9.
8. MacDorman MF, Kirmeyer S. Fetal and perinatal mortality, United States, 2005. Natl Vital Stat Rep 2009;57:1-19.
9. Kassebaum NJ, Bertozzi-Villa A, Coggeshall MS, et al. Global, regional, and national levels and causes of maternal mortality during 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. Lancet 2014;384:980-1004.
10. MacDorman MF, Declercq E, Cabral H, Morton C. Recent increases in the US maternal mortality rate: disentangling trends from measurement issues. Obstet Gynecol 2016;128:447-55.
11. Mittal P, Dandekar A, Hessler D. Use of a modified reproductive life plan to improve awareness of preconception health in women with chronic disease. Perm J 2014;18:28-32.
12. Bommaraju A, Malat J, Mooney JL. Reproductive Life Plan Counseling and Effective Contraceptive Use among Urban Women Utilizing Title X Services. Womens Health Issues 2015;25:209-15.
13. Waggoner MR. Motherhood preconceived: the emergence of the Preconception Health and Health Care Initiative. J Health Polit Policy Law 2013;38:345-71.
14. Stevens LM. Planning parenthood: health care providers' perspectives on pregnancy intention, readiness, and family planning. Soc Sci Med 2015;139:44-52.
15. Dehlendorf C, Fox E, Sobel L, Borrero S. Patient-centered contraceptive counseling: evidence to inform practice. Curr Obstet Gynecol Rep 2016;5:55-63.
16. Borrero S, Nikolajski C, Steinberg JR, et al. "It just happens": a qualitative study exploring low-income women's perspectives on pregnancy intention and planning. Contraception 2015;91:150-6.
17. Aiken AR, Borrero S, Callegari LS, Dehlendorf C. Rethinking the pregnancy planning paradigm: unintended conceptions or unrepresentative concepts? Perspect Sex Reprod Health 2016;48:147-51.
18. Bachrach CA, Newcomer S. Intended pregnancies and unintended pregnancies: distinct categories or opposite ends of a continuum? Fam Plann Perspect 1999;31:251-2.
19. Santelli J, Rochat R, Hatfield-Timajchy K, et al. The measurement and meaning of unintended pregnancy. Perspect Sex Reprod Health 2003;35:94-101.
20. Kavanaugh ML, Schwarz EB. Prospective assessment of pregnancy intentions using a single- versus a multi-item measure. Perspect Sex Reprod Health 2009;41:238-43.
21. Callegari LS, Borrero S, Reiber GE, et al. Reproductive life planning in primary care: a qualitative study of women veterans' perceptions. Womens Health Issues 2015;25:548-54.
22. The National Preconception Health and Health Care Initiative. Before, between and beyond toolkit. Available at: http://beforeandbeyond.org/toolkit/reproductive-life-plan-assessment/. Accessed September 25, 2015.
23. Oregon Foundation for Reproductive Health. http://www.onekeyquestion.org/. Accessed September 25, 2016.
24. Moos MK. Preconception health: where to from here? Womens Health Issues 2006;16:156-8.
25. Schwarz EB, Lohr PA, Gold MA, Gerbert B. Prevalence and correlates of ambivalence towards pregnancy among nonpregnant women. Contraception 2007;75:305-10.
26. Higgins JA, Popkin RA, Santelli JS. Pregnancy ambivalence and contraceptive use among young adults in the United States. Perspect Sex Reprod Health 2012;44:236-43.
27. Aiken AR, Dillaway C, Mevs-Korff N. A blessing I can't afford: factors underlying the paradox of happiness about unintended pregnancy. Soc Sci Med 2015;132:149-55.
28. Moos MK, Petersen R, Meadows K, Melvin CL, Spitz AM. Pregnant women's perspectives on intendedness of pregnancy. Womens Health Issues 1997;7:385-92.
29. Zabin LS. Ambivalent feelings about parenthood may lead to inconsistent contraceptive use—and pregnancy. Fam Plann Perspect 1999;31:250-1.
30. Woodsong C, Shedlin M, Koo H. The "natural" body, God and contraceptive use in the southeastern United States. Cult Health Sex 2004;6:61-78.
31. Henderson JT, Raine T, Schalet A, Blum M, Harper CC. "I wouldn't be this firm if I didn't care": preventive clinical counseling for reproductive health. Patient Educ Couns 2011;82:254-9.
32. Squiers L, Mitchell EW, Levis DM, et al. Consumers' perceptions of preconception health. Am J Health Promot 2013;27(Suppl):S10-9.
33. Institute of Medicine. Crossing the quality chasm: a new health system for the 21st century. Washington (DC): National Academies Press (US); 2001.
34. Barry MJ, Edgman-Levitan S. Shared decision making—pinnacle of patient-centered care. N Engl J Med 2012;366:780-1.
35. McCorry NK, Hughes C, Spence D, Holmes VA, Harper R. Pregnancy planning and diabetes: a qualitative exploration of women's attitudes toward preconception care. J Midwifery Womens Health 2012;57:396-402.
36. Bello JK, Adkins K, Stulberg DB, Rao G. Perceptions of a reproductive health self-assessment tool (RH-SAT) in an urban community health center. Patient Educ Couns 2013;93:655-63.
37. Lavender T, Platt MJ, Tsekiri E, et al. Women's perceptions of being pregnant and having pregestational diabetes. Midwifery 2010;26:589-95.
38. Dehlendorf C, Henderson JT, Vittinghoff E, et al. Association of the quality of interpersonal care during family planning counseling with contraceptive use. Am J Obstet Gynecol 2016;215:78.e1-9.
39. Rollnick S, Butler CC, Kinnersley P, Gregory J, Mash B. Motivational interviewing. BMJ 2010;340:c1900.
40. Elwyn G, Dehlendorf C, Epstein RM, Marrin K, White J, Frosch DL. Shared decision making and motivational interviewing: achieving patient-centered care across the spectrum of health care problems. Ann Fam Med 2014;12:270-5.
41. Bellanca HK, Hunter MS. One Key Question: preventive reproductive health is part of high quality primary care. Contraception 2013;88:3-6.
42. Stern J, Larsson M, Kristiansson P, Tyden T. Introducing reproductive life plan-based information in contraceptive counselling: an RCT. Hum Reprod 2013;28:2450-61.
43. Nelson AL, Shabaik S, Xandre P, Awaida JY. Reproductive life planning and preconception care 2015: attitudes of English-speaking family planning patients. J Womens Health (Larchmt) 2016;25:832-9.
44. Helfrich CD, Dolan ED, Simonetti J, et al. Elements of team-based care in a patient-centered medical home are associated with lower burnout among VA primary care employees. J Gen Intern Med 2014;29(Suppl):S659-66.
45. Reid RJ, Coleman K, Johnson EA, et al. The group health medical home at year two: cost savings, higher patient satisfaction, and less burnout for providers. Health Aff (Millwood) 2010;29:835-43.