COMMENTARY



One Key Question®: First Things First in Reproductive Health

Deborah Allen¹ · Michele Stranger Hunter² · Susan Wood³ · Tishra Beeson⁴

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Abstract Objectives Preconceptional health care is increasingly recognized as important to promotion of healthy birth outcomes. Preconceptional care offers an opportunity to influence pregnancy timing and intent and mother's health status prior to conception, all predictors of individual outcomes and of inequality in birth outcomes based on race, ethnicity and class. Methods One Key Question, a promising practice developed in Oregon which is now attracting national interest, provides an entry point into preconceptional care by calling on providers to screen for pregnancy intent in well woman and chronic disease care for women of reproductive age. For women who choose not to become pregnant or are not definitive in their pregnancy intent, One Key Question provides an opportunity for provision of or referral to counseling and contraceptive care. Results Adoption of One Key Question and preconceptional care as standard practices will require important shifts in medical practice challenging the longstanding schism between well woman care generally and reproductive care in particular. Adoption will also

require shifts in cultural norms which define the onset of pregnancy as the appropriate starting point for attention to infant health. *Conclusions for Practice* This commentary reviews the case for preconceptional care, presents the rationale for One Key Question as a strategy for linking primary care to preconceptional and/or contraceptive care for women, outlines what is entailed in implementation of One Key Question in a health care setting, and suggests ways to build community support for preconceptional health.

Keywords One Key Question[©] · Preconceptional health · Family planning · Well woman care

Significance

Policy makers, advocates and provider and public health organizations increasingly recognize the importance of access to preconceptional care or optimal contraceptive care for sexually active, reproductive age women. Emerging consensus on these points confronts current practice in health care, which divides reproductive care from primary health care for women. It also confronts prevailing culture, which defines the point at which pregnancy is established as the starting point for attention to infant health. This commentary suggests that universal, standardized screening for pregnancy intent using a non-judgmental approach offers a means to address both of these challenges to emerging best practice.

Introduction

The view that prenatal care is helpful, if not essential, to healthy birth outcomes for both woman and child is of

- Child, Adolescent and Family Health, Boston Public Health Commission, 1010 Massachusetts Ave #2, Boston, MA 02118, USA
- Oregon Foundation for Reproductive Health, P.O. Box 40472, Portland, OR 97240, USA
- Department of Health Policy and Management, Jacobs Institute of Women's Health Services, Milken Institute School of Public Health, George Washington University, 950 New Hampshire Ave NW, Washington, DC 20052, USA
- Department of Health, Educational Administration, and Movement Studies, Central Washington University, 400 E University Way, Ellensburg, WA 98926, USA



[☐] Deborah Allen dallen@bphc.org

relatively recent origin (Ballantyne 1901). The concept of prenatal medical care was first introduced before 1900, but got full traction and was incorporated into federal policy only in 1985, with publication of research findings linking prenatal care to reduced incidence of low birth weight (Alexander and Kotelchuck 2001). Despite its limited antecedents and despite continued controversy about whether and how prenatal care improves outcomes, it has become a tenet of both clinical and popular culture.

The strongest case can be made for prenatal care in the presence of specific conditions that compromise pregnancy health either directly (as in the case of diabetes) or indirectly (as in the case of certain medications or treatments for cancers, mental illness) (Centers for Disease Control and Prevention 2014). Recently, the terms medical and health home have been used to define a broader view of health care as a hub for services that address patients' social circumstances (Patient-Centered Primary Care Collaborative 2015). These models align with emerging life course research that suggests a pathway from adverse social conditions to adverse health outcomes with stress as the mediating link (Collins et al. 2011; Hudson et al. 2016). New models of prenatal care delivery, including group care (notably Centering Pregnancy) and an enhanced maternity medical home offer a broader view of the potential of prenatal care to improve birth outcomes (Bello et al. 2015; Handler and Johnson 2016).

An article by Verbiest et al. in a previous issue of this journal, argued that even that broadened version of prenatal care is not enough (Verbiest et al. 2016). The article called for a reproductive justice movement in social, political and cultural, as well as health domains to improve birth outcomes. As Verbiest et al. and other commentators suggest, an important component of new thinking about reproductive health is new thinking about reproductive health care. In this commentary, we focus on that aspect of the movement called for by Verbiest et al., reflecting an emerging strategy that moves the center of gravity in relation to health care intervention to improve birth outcomes backwards from conception and places it in the health status of the woman prior to pregnancy. This new strategy calls for changes in clinical care and in the broader society. In the former, it implies a paradigm shift away from the bifurcation of women's health care to integrate preconceptional health into the "normal" non-reproductive side of the women's health divide. In the latter, it implies building a culture among the population and women that recognizes the importance of the health of the woman in advance of a potential pregnancy for both mother and child.

This is no small change, given the traction of prenatal care as currently configured in the structure of medical practice and in our culture. In terms of medical practice, the emphasis on prenatal care has led to a system that institutionalizes the moment pregnancy is confirmed as the starting point for concern about reproductive health. Thus, a study based on data from the National Ambulatory Care Survey found that among women of reproductive age receiving primary care in 2009-10, only 14% reported receiving reproductive health care from their primary care providers while another 30% reported receiving reproductive care from a separate reproductive health specialist (Bello et al. 2015). This means that 56% of women receiving primary care that year received no reproductive care at all. In terms of culture, the image of prenatal care as a rite of passage identifying the woman's transition to maternal status has become iconic. Hundreds of movies and TV shows memorialize the obstetrician's office (or more recently, the ultrasonographer's cubicle) as the locus in which motherhood commences.

There is abundant evidence that the prenatal care paradigm has not lived up to its early promise. Twenty-first century public health is faced with rising maternal death rates, stagnant progress in reducing fetal and infant mortality and growing inequality between women of different race, ethnicity and income groups (MacDorman et al. 2016; MacDorman and Gregory 2015).

Two bodies of data highlight the inadequacy of our current focus. The first is data from PRAMS and other client survey data systems which indicate the prevalence of unintended pregnancy among childbearing women in the U.S. generally, and among women of color and women with low income (Centers for Disease Control and Prevention 2016). Given the range of studies revealing associations between unintended pregnancy and a spectrum of adverse pregnancy outcomes even after controlling race, class and other potential confounders, these prevalence findings are of concern. The second body of relevant data is a set of PPOR (Perinatal Periods of Risk) studies conducted around the country (Demont-Heinrich et al. 2013; Besculides and Laraque 2005). Taken together, these analyses suggest that the challenges faced by U.S. women, and especially women who experience social marginalization based on race/ethnicity, income or both, arise prior to pregnancy, and the failure of our system to invest in improved women's health prior to pregnancy precludes opportunities to address those challenges. The logical conclusion we draw from these findings is that we need a cohesive approach to health that, as Verbiest et al. suggest, engages women (and men) in care that seeks to optimize health and minimize exposures that compromise health as far in advance of a possible pregnancy as possibility. That implies a health care system with capacity (and commitment) to address reproductive aspirations and challenges prior to pregnancy and a social awareness of and commitment to the importance of preconceptional health.

ONE KEY QUESTION (OKQ)[®] was developed by the Oregon Foundation for Reproductive Health as a means



of operationalizing the paradigm shift from prenatal to prepregnancy care. OKQ calls for routine integration of proactive screening for pregnancy intention by asking "Would you like to become pregnant in the next year?" during all clinic visits. Novel in its approach, this question asks the woman to consider and respond based on what she wants, rather than what she plans, in order to more accurately identify the preventive reproductive health services she needs.

Unlike previously developed dichotomous screening approaches, this offers women the option to respond based on a continuum between yes and no, with "I'm Unsure," or "I'm Okay Either Way," as meaningful choices distinct from the two extremes. It ties each of these responses to patient-centered follow-up protocols that focus on contraception and/or preconception care and that may be implemented in a variety of care settings (Oregon Health Authority 2014).

OKQ advances the aim of reproductive life planning while differing from the typical framing of interventions in that domain by focusing on what women want rather than what they plan. The change in emphasis is significant. It can avoid off-putting dissonance for those women whose religious or cultural beliefs are antithetical to any version of reproductive self-determination: those who see pregnancy as the result of God's will or fate, rather than a woman's choice. It also obviates the need for a woman to admit to actively "planning" a pregnancy that may incur social disapprobation. Current cultural norms in the United States have eased considerably in relation to what used to be termed "unwed pregnancy." Taboos against "planning pregnancy while poor," however, are still going strong. Framing the discussion in terms of wanting, rather than planning, may ease women's concerns about risking provider disapproval. More generally, research suggests that among low income women, women, for whom each day, in fact each meal, may be a matter of insecurity and anxiety:

"Planning was not a particularly salient concept often because the context in which women felt planning should take place (marital relationship and stable finances) was elusive. As women did not acknowledge the health benefits to either mother or infant of a planned pregnancy, the inherent value of planning and preparing for a pregnancy was seemingly not evident (Borrero et al. 2015)."

The logic of OKQ aims at optimizing access to reproductive care by building standardized screening into "regular" women's health care; at the same time, OKQ is designed to improve the quality of reproductive care, by increasing the probability of a forthright conversation between patient and provider starting with acknowledgement and support for the patient's true aspirations.

Implementation: In the Clinic Setting

Successful implementation of OKQ requires (a) a plan for systematic incorporation of screening into standard health care that incorporates privacy and (b) a set of site-specific protocols guiding the course of care for each woman based on her response to screening, minimizing barriers. In fact, these elements are fundamental to any successful screening program. In regard to the former, women may be asked to consider and respond to the question on paper or via email prior to a visit or through material given out at the front desk upon arrival. The question can be posed during check in or once the patient is roomed, or built into the process for obtaining a health history, ascertaining vital signs or recording a problem list to inform the visit, assuming privacy can be assured. It can be asked by a nurse or physician or by a medical assistant or other paraprofessional on the clinic team if appropriate. How the question gets posed will vary from site to site; the key points are to promote consistency and effectiveness of screening while avoiding distraction from the primary aim of the medical appointment. Incorporation of OKQ into a site's electronic medical records is one strategy to promote this kind of consistency, regardless of the flow of the screening process at a particular site. Based on the women's response, services are offered by the clinician or someone else on the care team (RN, health educator) during the same appointment or a return appointment, a warm hand-off to another team member or referral to an outside clinic. Here the critical elements are a set of well planned, clearly described protocols that define next steps while minimizing barriers, based on each woman's response.

When a Woman Responds "Yes"

When a woman indicates that she would like to become pregnant within the year, follow-up should include assessment and treatment based on the core preconception care factors recommended by the American Congress on Obstetrics and Gynecology (ACOG) and other national and international guidelines. These factors are:

- Undiagnosed, untreated or poorly controlled medical conditions
- Immunization history
- Medication and radiation exposure in early pregnancy
- Nutritional issues—including folic acid supplementation
- Family history and genetic risk
- Tobacco and substance use and other high-risk behaviors
- Occupational and environmental exposures



- Social issues
- Mental health (American Congress of Obstetricians and Gynecologists 2005)

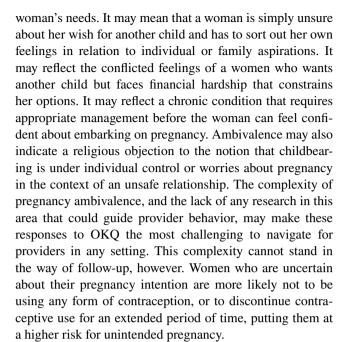
While action around most of these factors can wait until it is possible to set up or refer for a full preconceptional visit, others, notably folic acid supplementation or social issues that place a woman at immediate risk, should be addressed at the point of screening to assure timely prevention and avert immediate danger. It also makes sense for sites to offer basic anticipatory guidance, whether through direct interaction with a provider or team member or through handouts or other media.

When a Woman Responds "No"

Follow up for women who respond to OKQ with a clear "no," who are of reproductive age, are sexually active (or may in the foreseeable future become sexually-active) and are at risk for pregnancy calls for a discussion about current use of a contraceptive method. A recent study of lowincome women receiving health care at federally qualified health centers found that nearly 30% of women who did not answer "yes" to OKQ reported no contraceptive use (Wood et al. 2015). Thus, ascertaining whether a woman is using contraception, is satisfied with her method choice, and is using it consistently and accurately is critical. Furthermore, providers should discuss all contraceptive options with women, including long-acting reversible contraceptives (LARCs) which offer the highest continuation rates among methods (Hatcher 2011; American College of Obstetricians and Gynecologists 2015). This process of contraceptive counseling and education should be delivered with a focus not only on effectiveness of the method, but also on the values, needs and preferences of the woman, and, at the woman's discretion, her partner (Dehlendorf et al. 2016). Here again, sites may use different approaches to scheduling this conversation and providing the range of contraceptive services. It may be incorporated into well women visits but scheduled separately for visits focused on other health issues. In some cases, it may require referral to a different department in a medical center or to a different clinical setting altogether, however timeliness and removal of barriers to care are essential. The critical point is that each site have protocols that makes the process as easy as possible for both patient and provider.

When a Woman Response, "I Don't Know" or "I'm Okay Either Way"

Follow-up for a woman who expresses ambivalence about pregnancy calls for particular sensitivity to the individual



Whatever the cause of ambivalence, providers should make time available to work with the woman to determine what that intervention should be, and whether continuation or initiation of her choice of contraceptive method is appropriate. Given the complexity of responses in this domain, it is likely, however, that follow up may require a further visit whether in house or via referral. Some of the issues that drive ambivalence are particularly sensitive, so there is special value to follow up with a known provider or via a warm hand-off in these cases (Tindall 2009). Whoever the subsequent provider is, though, it is critical that s/he be well trained to support reproductive decision-making. Between the screening visit and whatever follow-up approach is chosen, it may be appropriate for the provider to offer the women both folic acid supplementation if pregnancy is not precluded by the woman's current contraceptive method and access to a short-term contraceptive option.

Implementation: Beyond the Clinic Walls

Widespread adoption of OKQ is unlikely to succeed if implementation efforts are limited to the clinic setting. A clinic-only approach, even if universally implemented, will only reach women of reproductive age who seek out or require clinical care prior to pregnancy. Literature suggests that this would exclude 23% of U.S. women in any given year (Ranji and Salganico 2011). That 23% is likely to include disproportionately high numbers of women at elevated risk for unintended pregnancy under current circumstances: women who are young, poor, have low paying jobs with limited benefits, and women of color (Ranji and Salganico 2011). And the reality is, of course, that we are



unlikely to come anywhere close to universal implementation of OKQ in the clinic setting without creating outside support for change.

Experience with other health issues that call for changes in clinical practice and in cultural norms suggest two critical areas for effort outside the clinic. The first involves creation of funding and policy environments that encourage uptake of this question through policy advocacy. Strategies in this domain could include incorporation of screening for pregnancy intent into a panel of screening activities required for third party reimbursement in well-woman visits, building the existence of protocols for both contraceptive counseling (already incorporated into the ACA) and preconceptional counseling into requirements for new ACOs at the state level, and mandatory coverage for a preconceptional visit as part of the bundled rate for pregnancy care.

An additional set of strategies could target attitudes and beliefs among women and their communities, introducing the idea of preconceptional care as a topic of health education and a focus of community organizing. One Healthy Start program experimented with an outreach campaign around OKQ, using bus stop ads, posters and fliers to be distributed by community organizations, and tabling at local community and 4 year colleges to reach out to women with the message (Boston Public Health Commission 2015). While the scope of the effort was too small for meaningful outcome evaluation, the effort did demonstrate the feasibility of consumer outreach around OKQ.

Beyond Implementation

Beyond the steps required to achieve implementation of OKQ are steps required for full realization of its potential to improve women's health and birth outcomes. Once asked, OKQ will shine a light on deficits in access to or quality of care in any of the areas that arise in a preconceptional health visit (chronic disease management, smoking cessation, weight loss or nutrition services, etc.). OKQ raises the same questions in relation to contraceptive care: women who say they do not wish to become pregnant must have access to informed counseling and a full range of contraceptive options. Where access is constrained by lack of facilities, workforce shortages or inadequate funding, OKQ offers an opportunity to highlight and address those gaps through program change and advocacy.

Conclusion

Verbiest et al. identify three interrelated "core constructs for change" that underlie their call for a new movement around reproductive health: (1) the insights offered by life course theory, which links each woman's reproductive health experience to all aspects of her life history, including biological and environmental factors affecting her health from gestation through adulthood; (2) the emerging recognition that the role of health care in promoting optimal birth outcomes for both woman and child must start prior to conception and (3) the emphasis—implicit in life course theory but worthy of mention in its own right—on social factors, and particularly racism and poverty which so strongly predict health resource access and health outcomes in our society. To these three forces we would add a fourth, the continuing battle to assure reproductive choices for all women, as critical for optimal outcomes for individual women and for public health at community and national levels.

One Key Question has its roots in the fourth factor. It was developed by the Oregon Foundation for Reproductive Health in recognition that choice means not only the right to avert an unintended, ill-timed or unwanted pregnancy, but also the right of a woman to receive clinical support for a healthy pregnancy even if she is single, poor, or vulnerable to social marginalization based on race, ethnicity, class or all three.

OKQ equally reflects the spirit of the three constructs identified by Verbiest et al. It calls for full embrace of the life course experience of each woman by the health care system. It is designed explicitly as an entry point to preconceptional health for women who choose or are open to pregnancy. And it calls on providers to embrace and support the reproductive aspirations of every woman, regardless of social status, and provide a pathway for each woman to the supports she needs to optimize pregnancy outcomes.

Like Verbiest et al. in their prior paper, we challenge health care providers—individuals and agencies—and those who work for health equity, social justice and women's rights—to adopt the practice and embrace the spirit of aligning maternal and child health and the women's health movement in the effort to improve women's health and well-being and the health and well-being of their children.

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References

Alexander, G. R., & Kotelchuck, M. (2001). Assessing the role and effectiveness of prenatal care: History, challenges, and directions for future research. *Public Health Reports*, 116(4), 306–316.

American College of Obstetricians and Gynecologists. (2015). Committee opinion no. 642 summary: Increasing access to contraceptive implants and intrauterine devices to reduce unintended pregnancy. *Obstetrics & Gynecology*, 126(4), e44–48.

American Congress of Obstetricians and Gynecologists (ACOG). (2005). The importance of preconception care in the continuum



- of women's health care. Retrieved from http://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Gynecologic-Practice/The-Importance-of-Preconception-Care-in-the-Continuum-of-Womens-Health-Care.
- Ballantyne, J. W. (1901). A plea for a pro-maternity hospital. *British Medical Journal*, 1(2101), 813–814.
- Bello, J. K., Rao, G., & Stulberg, D. B. (2015). Trends in contraceptive and preconception care in United States ambulatory practices. *Family Medicine*, 47(4), 264–271.
- Besculides, M., & Laraque, F. (2005). Racial and ethnic disparities in perinatal mortality: Applying the perinatal periods of risk model to identify areas for intervention. *Journal of the National Medi*cal Association, 97(8), 1128–1132.
- Borrero, S., Nikolajski, C., Steinberg, J. R., Freedman, L., Akers, A. Y., Ibrahim, S., & Schwarz, E. B. (2015). "It just happens": A qualitative study exploring low-income women's perspectives on pregnancy intention and planning. *Contraception*, 91(2), 150–156.
- Boston Public Health Commission. (2015). Boston health equity goals mid-point report. Retrieved from http://www.bphc.org/whatwedo/health-equity-social-justice/Documents/Boston%20 Health%20Equity%20Goals%20Midpoint%20Report.pdf.
- Centers for Disease Control and Prevention. (2014). Medical conditions. Retrieved from https://www.cdc.gov/preconception/careforwomen/conditions.html.
- Centers for Disease Control and Prevention. (2016). *PRAMStat system*. Retrieved from http://www.cdc.gov/prams/pramstat/index. html.
- Collins, J. W., Rankin, K. M., & David, R. J. (2011). Low birth weight across generations: The effect of economic environment. *Maternal and Child Health Journal*, 15(4), 438–445.
- Dehlendorf, C., Fox, E., Sobel, L., & Borrero, S. (2016). Patient-centered contraceptive counseling: Evidence to inform practice. *Current Obstetrics and Gynecology Reports*, *5*(1), 55–63.
- Demont-Heinrich, C., Hawkes, A., Ghosh, T., Beam, R., & Vogt, R. (2013). Risk of very low birth weight based on perinatal periods of risk. *Public Health Nursing*, *31*(3), 234–242.
- Handler, A., & Johnson, K. (2016). A call to revisit the prenatal period as a focus for action within the reproductive and perinatal

- care continuum. Maternal and Child Health Journal, 20(11), 2217–2227.
- Hatcher, R. A. (2011). In J. Trussell, A. L. Nelson, W. Cates, & D. Kowal (Eds.), Contraceptive technology: Twentieth revised edition. New York, NY: Ardent Media.
- Hudson, D. L., Neighbors, H. W., Geronimus, A. T., & Jason, J. S. (2016). Racial discrimination, John Henryism, and depression among African Americans. *The Journal of Black Psychology*, 42(3), 221–243.
- MacDorman, M. F., Declercq, E., Cabral, H., & Morton, C. (2016). Is the United States maternal mortality rate increasing? Disentangling trends from measurement issues. *Obstetrics and Gynecol*ogy, 128(3), 447–455.
- MacDorman, M. F., & Gregory, E.C.W. (2015). Fetal and perinatal mortality: United States, 2013. *National Vital Statistics Report*, 64(8), 1–24.
- Oregon Health Authority. (2014). Effective contraceptive use among women at risk of unintended pregnancy guidance document. Retrieved from https://www.oregon.gov/oha/analytics/CCOData/Effective%20Contraceptive%20Use%20Guidance%20Document. pdf.
- Patient-Centered Primary Care Collaborative. (2015). Defining the medical home. Retrieved from https://www.pcpcc.org/about/ medical-home.
- Ranji, U., & Salganico, A. (2011). Women's health care chart-book: key findings from the Kaiser women's health survey.
 Retrieved from http://kff.org/womens-health-policy/report/womens-health-care-chartbook-key-findings-from/.
- Tindall, E.J. (2009). Ravenswood: Bringing behavioralists into an FOHC. National Council Magazine, 18, 37–38.
- Verbiest, S., Malin, C. K., Drummonds, M., & Kotelchuck, M. (2016). Catalyzing a reproductive health and social justice movement. *Maternal and Child Health Journal*, 20(4), 741–748.
- Wood, S. F., Beeson, T., Goldberg, D. G., Mead, K. H., Shin, P., Abdul-Wakil, A., Rui, A., Sahgal, B., Shimony, M., Stevens, H., & Rosenbaum, S. (2015). Patient experiences with family planning in community health centers. Retrieved from https://publichealth.gwu.edu/sites/default/files/Geiger_Gibson_Family_Planning_Report_2015.pdf.

