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### Title

Comparison of a Person-Centered Pregnancy Prevention Question and One Key Question® to Assess Postpartum Contraceptive Needs

### Permalink

<https://escholarship.org/uc/item/2b7914bq>

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### Publication Date

2024-04-01

### DOI

10.1016/j.contraception.2024.110465

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Peer reviewed

1 **Title**  
2 Comparison of a Person-Centered Pregnancy Prevention Question and One Key  
3 Question® to Assess Postpartum Contraceptive Needs  
4

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24 **Word Count**  
25 Main text: 1,195 words  
26 Abstract: 100 words  
27

28 **Funding**  
29 This work was supported by the UCSF California Preterm Birth Initiative and the  
30 National Center for Advancing Translational Sciences, National Institutes of Health  
31 [KL2 TR001870]. Its contents are solely the responsibility of the authors and do not  
32 necessarily represent the official views of the NIH. Sponsors were not involved in  
33 the study design, data collection, data analysis, interpretation of data, writing of the  
34 report, or the decision to submit the article for publication.  
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38

39 **Abstract**

40

41 **Introduction:** Pregnancy intention is widely used to screen for contraceptive  
42 needs, yet its relevance to postpartum individuals has not been demonstrated.

43

44 **Methods:** We surveyed 234 postpartum individuals to assess the alignment  
45 between pregnancy intentions in the next year and current desire to prevent  
46 pregnancy.

47

48 **Results:** Most individuals (87%) desired pregnancy prevention now, including 73%  
49 of individuals who desired or were ambivalent about pregnancy in the next year.

50

51 **Conclusion:** A majority of individuals considering pregnancy in the next year  
52 desired pregnancy prevention now. Directly assessing current desire to prevent  
53 pregnancy may be more specific for contraceptive needs in postpartum individuals.

54

55

56 **Keywords**

57 Contraception, family planning, postpartum, patient-centered care, health services  
58 research

59

60

61 **Abbreviations**

62 OKQ = One Key Question®

63 CI = confidence interval

64



66 **Introduction**

67

68 Addressing postpartum contraceptive needs is a critical component of perinatal care  
69 that can help to optimize birth outcomes, including by preventing undesired  
70 pregnancies with short interpregnancy intervals [1]. A prominent approach to  
71 determining need for contraceptive care has been to assess pregnancy intention in  
72 the next year, including in postpartum individuals [2,3]. One Key Question® (OKQ)  
73 is an increasingly utilized means of assessing pregnancy intention in the next year  
74 [4]. However, OKQ, or pregnancy intention screening more broadly, have not been  
75 found to have a consistently positive impact on patient experience, provision of  
76 reproductive health services, or health outcomes [5–9]. Additionally, since inquiring  
77 about pregnancy intentions in the next year does not directly assess current desire  
78 to prevent pregnancy, clinicians may need to ask follow-up questions to clarify  
79 ambivalence and current health care needs [10]. Further, pregnancy intention is a  
80 complex and dynamic personal decision affected by many contextual factors that  
81 may be beyond the scope of a medical visit [11]. Additionally, not everyone relates  
82 to the concept of pregnancy planning [12]. Importantly, individuals who are  
83 ambivalent about future pregnancy or are planning pregnancy may still desire to  
84 use contraception, which clinicians could potentially miss if solely using pregnancy  
85 intention to identify care needs [13]. Understanding the relationship between  
86 pregnancy intention in the next year and current desire to prevent pregnancy in the  
87 postpartum population can help inform effective and patient-centered interventions  
88 to optimize the delivery of postpartum contraceptive care. We therefore conducted  
89 a cross-sectional survey of postpartum individuals, asking both pregnancy intention  
90 in the next year and current desire to prevent pregnancy.

91

92 **Methods**

93

94 We surveyed 234 English or Spanish-speaking individuals who were 2-6 months  
95 postpartum. Recruitment and data collection occurred at three pediatric primary  
96 care clinics in the San Francisco Bay Area, California that serve socioeconomically,  
97 racially, and ethnically diverse populations. Data collection occurred during July  
98 2019-October 2020. Before March 2020, we recruited and administered electronic  
99 surveys in-person at well-child visits. Recruitment after March 2020 occurred by  
100 phone due to COVID-19 restrictions. We called eligible individuals up to three times  
101 within a week of their infants' well-child visit and verbally administered surveys.  
102 Participants received \$25 gift cards. We obtained informed consent prior to study  
103 procedures. The Institutional Review Board at the University of California, San  
104 Francisco approved the study.

105

106 Sociodemographic variables included self-reported age, race and ethnicity, and  
107 insurance type, as detailed in a prior publication [14]. We assessed desire to  
108 prevent pregnancy with an item previously used in statewide surveys, "*Do you want*  
109 *to prevent pregnancy now?*" with five response choices: *Yes, I am already doing*  
110 *something to prevent pregnancy; Yes, I want to start preventing pregnancy; No, I*  
111 *don't want to prevent pregnancy; I am unsure whether I want to prevent pregnancy;*  
112 *and This question does not apply to me* [15]. We measured pregnancy intention  
113 using OKQ: "*Would you like to become pregnant in the next year?*" with four  
114 response choices: *Yes, No, Unsure, and OK either way*. We assessed pregnancy  
115 acceptability using, "*How would you feel if you got pregnant in the next year?*" with  
116 six response choices: *Very upset, Somewhat upset, Not sure, I wouldn't mind,*  
117 *Somewhat pleased, and Very pleased.*

118

119 We conducted descriptive analysis of sociodemographic variables. We categorized  
120 desire to prevent pregnancy now and pregnancy intention responses as Yes,  
121 Ambivalent, or No and cross-tabulated frequencies (n) and relative frequencies (%).  
122 We cross-tabulated pregnancy prevention now and pregnancy intention and  
123 computed the 95% confidence interval (CI) for the difference in proportions.

124

## 125 **Results**

126

127 Of 305 individuals contacted, 263 (86%) participated. We excluded 29 individuals  
128 whose response to a primary outcome was “does not apply” or missing, resulting in  
129 a sample size of 234. Excluded individuals did not differ from individuals included in  
130 the final analytic sample in terms of age, race, ethnicity, or insurance type.  
131 Participants included in the final analytic sample were on average 32 years (range  
132 17-51 years) and self-identified as Asian 15%, Black 10%, Hispanic/Latina 37%,  
133 White 28%, or multiracial or other 10%. Insurance type was commercial 60%, public  
134 38%, or uninsured 2%.

135

136 Most individuals (171 of 234; 73%) did not want to become pregnant in the next  
137 year, and 87% stated they wished to prevent pregnancy now -- a 14% (95% CI 7,  
138 21%) difference (Table 1). Of the 63 who wished to become pregnant in the next  
139 year or were ambivalent about pregnancy, 73% desired pregnancy prevention now,  
140 while among those not desiring pregnancy, 92% desired pregnancy prevention. The  
141 proportion of individuals with ambivalence about pregnancy in the next year was  
142 greater than the proportion with ambivalence about current desire to prevent  
143 pregnancy (21% vs. 5% -- a 16% (95% CI 10, 22) difference. Pregnancy

144 acceptability was highly variable among participants who were not planning a  
145 pregnancy or who were ambivalent (Figure 1).

146

## 147 **Discussion**

148

149 In this study, almost three quarters of individuals who would consider pregnancy in  
150 the next year still desired pregnancy prevention. This finding demonstrates the  
151 potential limitation of pregnancy intention screening for identifying current  
152 pregnancy prevention needs. Determining current needs is particularly important  
153 given the benefit of preventing undesired, shortly spaced pregnancies [1],  
154 especially with the present lack of abortion access in much of the United States  
155 [16]. We found a high degree of ambivalence about pregnancy intentions and  
156 substantial variability in pregnancy acceptability across pregnancy intention groups,  
157 which aligns with literature on the complexity of pregnancy perceptions [17]. These  
158 results call into question the focus primarily on pregnancy intention by postpartum  
159 care providers aiming to identify current contraceptive needs. Furthermore, we  
160 posit that the clinician role should not be to resolve ambivalence about the personal  
161 decision to plan or to not plan a pregnancy, but rather to assess the current desire  
162 for pregnancy prevention. Shifting provider focus to patients' current needs can  
163 generate more actionable clinical information for contraceptive counseling and is  
164 more consistent with diverse patient perspectives on family planning [12].

165

166 Pregnancy intention may have utility in public health and research contexts,  
167 however for clinical purposes, directly assessing current contraceptive needs is a  
168 more person-centered and directly actionable construct. This may be especially true  
169 during the postpartum months, which is a time of significant transition, when



170 preferences about desired family size and birth spacing may evolve. Additionally,  
171 assessing current desire to prevent pregnancy may be more clinically expedient  
172 given the relatively low rate of ambivalence, compared to the more complex topic  
173 of pregnancy intention [18].

174

175 Our findings should be interpreted considering study limitations, including possible  
176 social desirability bias, e.g., overreporting desire to use contraception among  
177 women not intending pregnancy in response to normative expectations about  
178 pregnancy prevention. The context of declining pregnancy intentions during the  
179 early pandemic may also have affected survey responses, as well as what  
180 participants may have perceived as socially desirable responses.[19] Additionally,  
181 there may be limited generalizability to other populations or regions due to  
182 differences in the barriers and facilitators to accessing health care.

183

184 Our ability to ensure that all individuals who want to prevent pregnancy have  
185 access to contraception depends on the use of effective screening questions. These  
186 findings prompt consideration of broader clinical implementation of screening for  
187 desire to prevent pregnancy in lieu of questions about pregnancy intention in the  
188 next year.

189

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191

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265

266 **Tables and Figures**

267

268 **Table 1.** Cross-tabulation of Pregnancy Intention in Next Year (One Key Question®)  
 269 and Current Desire to Prevent Pregnancy, among 2-6 Month Postpartum Individuals  
 270 in California 2019-2020 (n=234)

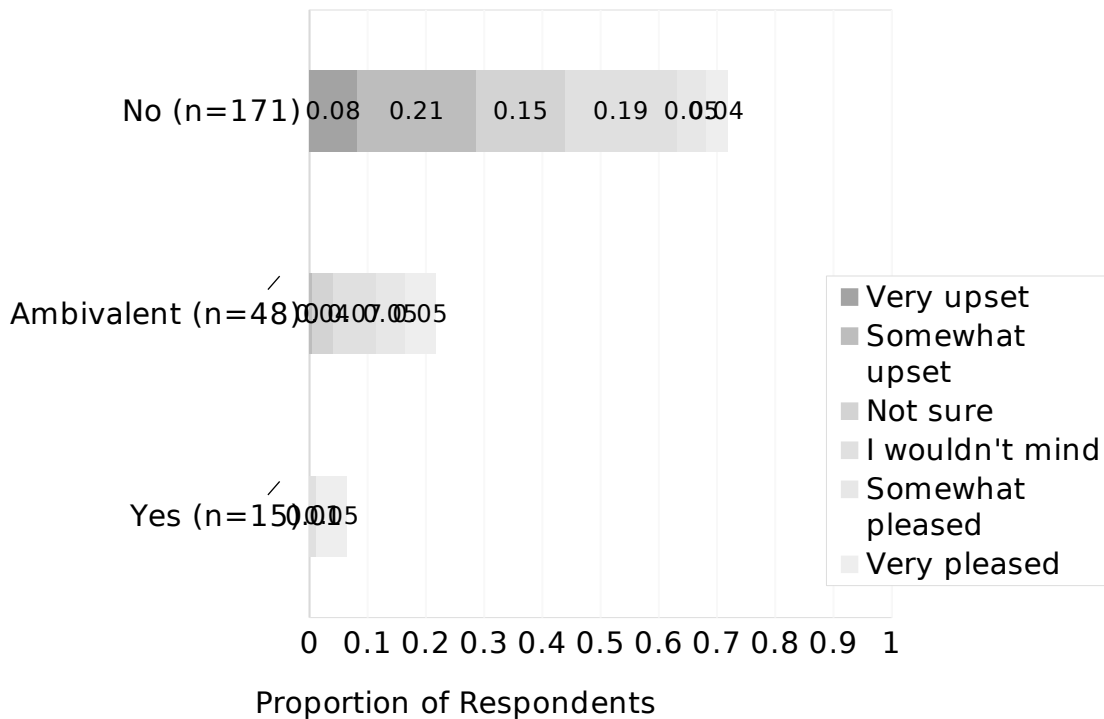
271

<b>Pregnancy Prevention Now</b> <i>“Do you want to prevent pregnancy now?”</i>	<b>One Key Question®:</b> <i>“Would you like to become pregnant in the next year?”</i>			
	<i>Yes, want to become pregnant in next year</i>	<i>Ambivalent</i>	<i>No, do not want to become pregnant in next year</i>	<b>Total</b>
	n % (95% CI)	n % (95% CI)	n % (95% CI)	n % (95% CI)
<i>Yes, want to prevent pregnancy now</i>	9 60% (35%-81%)	37 77% (63%-87%)	158 92% (87%-96%)	204 87% (82%-91%)
<i>Ambivalent</i>	1 7% (1%-35%)	4 8% (3%-20%)	6 4% (2%-8%)	11 5% (3%-8%)
<i>No, do not want to prevent pregnancy now</i>	5 33% (15%-60%)	7 15% (7%-28%)	7 4% (2%-8%)	19 8% (5%-12%)
<b>Total</b>	15 6% (4%-10%)	48 21% (16%-26%)	171 73% (67%-78%)	234

CI=confidence interval; Response choices for current pregnancy prevention (*Do you want to prevent pregnancy now?*) included: *Yes, I am already doing something to prevent pregnancy*; *Yes, I want to start preventing pregnancy*; *No, I don't want to prevent pregnancy*; *I am unsure whether I want to prevent pregnancy* (labeled *Ambivalent* in the table); and *This question does not apply to*

me. Response choices for OKQ (*Would you like to become pregnant in the next year?*) included: *Yes, No, Unsure, and OK either way (Ambivalent defined as Unsure or OK either way).*

272 **Figure 1.** Pregnancy Acceptability by Pregnancy Intention in the Next Year, among  
 273 2-6 Month Postpartum Individuals in California 2019-2020 (n=234)



274

275

276 Pregnancy Intention assessed using One Key Question®, “*Would you like to become*  
 277 *pregnant in the next year?*” with four response choices: *Yes, No, Unsure, and OK*

278 *either way (Unsure and OK either way were collapsed into an Ambivalent category);*

279 Pregnancy Acceptability assessed using “*How would you feel if you got pregnant in*

280 *the next year?*”