

**Appendix Table 1.** Key Questions for Systematic Review

<b>Key question number</b>	<b>Question</b>
1	Is there a relationship between contraceptive counseling interventions and improved health outcomes of family planning services?
2	Is there a relationship between contraceptive counseling interventions and improved behavioral outcomes of family planning services?
3	Is there a relationship between contraceptive counseling interventions and (a) client experience and/or (b) improved psychosocial outcomes (e.g., increased knowledge) of family planning services?
4	What are the barriers and facilitators for clinics in adopting and implementing contraceptive counseling interventions in the family planning setting?
5	Are there unintended negative consequences associated with contraceptive counseling interventions when used in the family planning setting?
6	What are clients' preferences with regard to contraceptive counseling approaches in the family planning setting?

*Note:* Questions are contextualized by the analytic framework presented in Figure 1.

**Appendix Table 2.** Search Term Sets for Systematic Review Series and Key Question 6

Set number	Concept	PubMed search terms <sup>a</sup>
1	Family planning	“family planning”[All fields] OR “family planning services”[MeSH] <sup>b</sup> OR “family planning services”[All fields] OR “family planning policy”[MeSH] OR “family planning policy”[All fields] OR “reproductive health services”[MeSH] OR “reproductive health services”[All fields] OR “Title X”[All fields] OR “Planned Parenthood”[All fields]
2	Contraception	contraception[MeSH] OR contracept*[All fields] OR “contraceptive agents”[MeSH] OR “contraceptive agents”[All fields] OR “contraceptive devices”[MeSH] OR “contraceptive devices”[All fields] OR “birth control”[All fields] OR “contraception behavior”[MeSH] OR “contraception behavior”[All fields]
3	Counseling	counseling[MeSH] OR counseling[All fields] OR “patient-centered”[All fields] OR “patient comprehension”[All fields] OR “patient understanding”[All fields] OR “patient participation”[MeSH] OR “patient participation”[All fields] OR “patient autonomy”[All fields] OR “decision making”[MeSH] OR “decision making”[All fields] OR “active decision”[All fields] OR “informed decision”[All fields] OR “informed choice”[All fields] OR “informed patient”[All fields] OR “informed client”[All fields] OR “informed consent”[MeSH] OR “informed consent”[All fields]
4	Communication	“communication”[All fields] OR “health communication”[MeSH] OR “health communication”[All fields] OR “risk communication”[All fields] OR “communicating risk”[All fields] OR “communication barriers”[MeSH] OR “communication barriers”[All fields] OR “patient communication”[All fields] OR

**Appendix**  
**Client Preferences for Contraceptive Counseling: A Systematic Review**  
**Fox et al.**

		<p>“professional-patient relations”[MeSH:NoExp] OR  “professional-patient relations”[All fields] OR  “nurse-patient relations”[MeSH] OR  “nurse-patient relations”[All fields] OR  “physician-patient relations”[MeSH] OR  “physician-patient relations”[All fields] OR  “information dissemination”[MeSH] OR  “information dissemination”[All fields] OR  “access to information”[MeSH] OR  “access to information”[All fields] OR  “information seeking behavior”[MeSH] OR  “information seeking behavior”[All fields] OR  “truth disclosure”[MeSH] OR  “truth disclosure”[All fields] OR  “risk perception”[All fields] OR  “perceived risk”[All fields] OR  “perception of risk”[All fields] OR  “risk management”[MeSH] OR  “risk management”[All fields] OR  “patient safety”[All fields]</p>
5	Follow-up/Continuity of care	<p>“continuity of patient care”[MeSH] OR  “continuity of patient care”[All fields] OR  “followup”[All fields] OR  “follow up”[All fields]</p>
6	Education	<p>“health education”[MeSH] OR  “health education”[All fields] OR  “health educator”[All fields] OR  “patient education as topic”[MeSH] OR  “patient education”[All fields] OR  “health literacy”[All fields]</p>
7	Patient preference <sup>c</sup>	<p>“patient preference”[MeSH] OR  “patient preference”[All fields] OR  “patient-centered care”[MeSH] OR  “patient-centered care”[All fields] OR  attitude*<sup>d</sup>[All fields] OR  percept*<sup>d</sup>[All fields] OR  experience*<sup>d</sup>[All fields] OR  perspect*<sup>d</sup>[All fields]</p>
8	All sets combined	<p>((#1) OR (#2)) AND ((#3) OR (#4) OR (#5) OR (#6)) AND (#7)</p>

<sup>a</sup>Adapted as needed for searches of other databases.

<sup>b</sup>Medical Subject Headings.

<sup>c</sup>Terms used for targeted search for studies published from October 1992 through February 2011. Terms in this set except those indicated by <sup>d</sup> were included in the Counseling set (#3) used in the search for studies published from March 2011 through November 30.

<sup>d</sup>Terms only used for targeted search for studies published from October 1992 through February 2011.

**Appendix**  
**Client Preferences for Contraceptive Counseling: A Systematic Review**  
**Fox et al.**

**Appendix Table 3.** Evidence on Client Preferences for Contraceptive Counseling

Reference, funding, location	Population	Research question(s)	Results	Design, quality, generalizability
<p>Becker and Tsui, 2008<sup>9</sup></p> <p>Funding: NR</p> <p>Location: U.S. (nationally representative)</p>	<p>Low income women (n=1,741) who had received family planning care</p> <p>Year of data collection: 1995</p> <p>Age distribution: 18–34 years</p> <p>Race/Ethnicity/Language: black 21%, Spanish-speaking Latina 6%, English-speaking Latina 10%, white 63%</p>	<p>What are racial/ethnic and/or language differences in low-income women’s preferences and perspectives on quality of family planning care?</p>	<p>English- and Spanish-speaking Latina participants were significantly more likely to prefer a female clinician (46% and 58% respectively, compared with 36% of white participants; AOR 1.8 and 3.6) and were significantly more likely to express high value for clinician continuity (77% and 83% respectively, compared with 66% of white participants; AOR 1.7 and 2.2). English-speaking Latina and black participants were significantly more likely to prefer receiving reproductive health care in general healthcare settings (62% and 61%, respectively, compared with 50% of white participants; AOR 1.5 and 1.6).</p>	<p>Level II-2, correlational (quantitative surveys)</p> <p>Strengths: Large, nationally representative sample allowing for comparison between racial/ethnic groups; random sampling design; high response rate minimizes non-response bias</p> <p>Limitations: Little exploration of client preferences due to nature of the survey; data analysis occurred more than a decade after data collection</p> <p>Generalizability: Moderate</p>
<p>Becker et al., 2009<sup>25</sup></p> <p>Funding: Population, Family, and Reproductive Health Department and the GFEF, JHSPH</p>	<p>Women (n=40) visiting clinics for family planning care</p> <p>Years of data collection: 2007</p> <p>Age distribution: 18–36 years</p> <p>Race/Ethnicity/Language: black 22.5%, English-</p>	<p>What factors influence women’s assessment of family planning services? Are there any differences among women of different racial, ethnic and language groups in reported family planning service experiences or</p>	<p>With regard to the counseling interaction, women valued detailed and personalized contraceptive information; empathetic, non-judgmental providers; and respect for decision autonomy. Spanish-speaking Latinas preferred language-appropriate care and contraceptive information; no other differences by language</p>	<p>Level III, descriptive (qualitative interviews)</p> <p>Strengths: In-depth interviews about lifetime experiences captured broad range of experiences; patients were approached on different days of the week, including evening and weekend hours, to reach diverse patients; relatively large sample for a qualitative study</p>

**Appendix**  
**Client Preferences for Contraceptive Counseling: A Systematic Review**  
**Fox et al.**

Location: San Francisco, California	speaking Latina 20%, white 20%, Spanish-speaking Latina 30%, mixed ethnicity 7.5%	service-related preferences or values?	or racial/ethnic groups were found.	Limitations: Potential social desirability bias; qualitative data limits comparisons across race/ethnicity/language  Generalizability: Low
Brown et al., 2013 <sup>1</sup>  Funding: NIH, UCSF-CTSI  Location: San Francisco, California	Nulliparous adolescents (n=20) with a history of IUD use  Years of data collection: 2010–2011  Age distribution: 15–24 years  Race/Ethnicity: Latina 40%, African American 30%, Asian 15%, white 10%, Pacific Islander 5%	What is the IUD adoption process among nulliparous adolescents? What is the role of the medical provider in this trajectory?	Preferences for counseling included friendly dynamics with providers, use of IUD insertion models, and personalized contraceptive information, including on side effects and addressing misinformation learned from friends and family.	Level III, descriptive (qualitative interviews)  Strengths: Rich data collection; interviews conducted until saturation of dominant themes reached  Limitations: Single recruitment site; convenience sample where half of eligible participants not interviewed due to logistics; no non-users of LARC included to understand their decision making processes and preferences  Generalizability: Low
Carvajal et al., 2017 <sup>1, b</sup>  Funding: RWJF  Location: Baltimore, Maryland	Young Latina women (n=16), most of whom were immigrants  Years of data collection: 2014–2015  Age distribution: 15–24 years  Population Race/Ethnicity: Latina 100%	What are Latinas' perspectives regarding specific factors that influence their contraceptive decision making, and their perspectives about the role of PCPs in decision making?	Participants strongly preferred relationships with their PCPs built on trust and communication, and valued assurance of visit confidentiality. Participants desired complete contraceptive information including information on side effects and method efficacy. Participants expressed strong desire not to be pressured in their method	Level III, descriptive (qualitative interviews and focus groups)  Strengths: Rich data collection; recruitment continued until saturation of themes reached; focus on specific experiences and preferences of Latina clients, which had not been specifically addressed in research on this topic

**Appendix**  
**Client Preferences for Contraceptive Counseling: A Systematic Review**  
**Fox et al.**

	Language: Spanish 94%, English 6%.		decisions, and linked experiences of pressure with racial/ethnic bias among providers.	Limitations: Focus groups were small (8 participants total in 3 groups), and some participants may not have felt comfortable sharing in groups
				Generalizability: Low
Chernick et al., 2017 <sup>42</sup>	Female adolescents (n=14) seeking care in emergency departments	What are the preferences of teens seeking emergency care for the delivery, content, and structure of texts in a text message program about pregnancy prevention?	Participants expressed preference for texts that were brief, professional, personalized, non-accusatory, and had links to websites. They valued information on multiple contraception options and information to correct common misconceptions about birth control.	Level III, descriptive (qualitative interviews)
Funding: NIH, NCATS	Years of data collection: 2013			Strengths: Rich data collection
Location: Unspecified urban setting in U.S.	Age distribution: 14–19 years			Limitations: Convenience sample from single recruitment site; no comparison to acceptability of texts in other healthcare settings
	Race/Ethnicity: Hispanic 93%, other races/ethnicities NR			Generalizability: Low
Dasari et al., 2016 <sup>35</sup>	Young women (n=15) who had experienced homelessness in the past 12 months	What role does provider communication play in women's ability to access LARC?	Participants perceived that providers withheld contraceptive methods to influence method choice, and desired complete and detailed information including information on side effects in order to make informed decisions. Participants also liked the use of visual aids during counseling and receiving information to take with them after visits.	Level III, descriptive (mixed methods, surveys and guided interviews)
Funding: NR	Years of data collection: NR			Strengths: Mixed-methods design allows both quantitative and qualitative understanding of experiences; recruitment from multiple locations and by multiple methods for heterogeneity
Location: Pittsburgh, Pennsylvania	Age distribution: 18–24 years			Limitations: Small convenience sample
	Race/Ethnicity: black 54%, white 33%, multiracial 13%			Generalizability: Low

**Appendix**  
**Client Preferences for Contraceptive Counseling: A Systematic Review**  
**Fox et al.**

Dehlendorf et al., 2010 <sup>31</sup>	Women (n=257) receiving post-abortion contraceptive counseling/care at a large urban abortion clinic	What are preferences regarding contraceptive decision making among women at high risk for unintended pregnancy? How do these preferences compare to those regarding general health decision making?	Women were more likely to desire making decisions autonomously in their contraceptive care than in general health care (50% vs 19%, $p<0.001$ ). This finding was strongest for women with Medicaid insurance (51% vs 17%, $p<0.001$ ). No patient characteristics were associated with contraceptive decision-making preferences.	Level III, descriptive (quantitative surveys)
Funding: SFP, NIH, NCRRL, UCSF-CTSI	Years of data collection: 2008–2009			Strengths: Use of validated Problem-Solving Decision-Making Scale <sup>45</sup> to compare decision making preferences in multiple healthcare contexts
Location: San Francisco Bay Area, California	Age distribution: 19–31 years			Limitations: Participants only eligible if they selected a short-acting method post-abortion; thus results may not generalize to populations choosing from full range of methods; data collection from a single site
	Race/Ethnicity: black 38%, Latina 23%, white 17%, Asian/API 13%, other 8%			Generalizability: Moderate
Dehlendorf et al., 2013 <sup>3</sup>	Black, Latina, and white women (n=42) receiving contraceptive counseling	What are patients' preferences about birth control counseling, and specifically for the decision making process?	Women preferred comprehensive contraceptive information, particularly about side effects. Patients preferred intimate and friend-like relationships with their providers. They preferred their providers be involved in the decision-making process but emphasize that the patient make the final method decision. Compared with white and English-speaking Latina participants, black and Spanish-speaking Latina participants felt more strongly that providers should only share their opinion	Level III, descriptive (qualitative interviews)
Funding: The Fellowship in Family Planning, NIH, NCATS, UCSF-CTSI	Years of data collection: 2009			Strengths: Rich data collection; relatively large sample size; participants recruited from 5 different locations
Location: San Francisco Bay Area, California	Age distribution: 19–46 years			Limitations: Differences in preferences observed in study may be due to socioeconomic factors not explored; qualitative data limits comparisons across race/ethnicity/language
	Race/Ethnicity/Language: non-Latina white 24%, black 24%, Latina Spanish-Speaking 31%, Latina English-speaking 21%			Generalizability: Low

**Appendix**  
**Client Preferences for Contraceptive Counseling: A Systematic Review**  
**Fox et al.**

			if deemed appropriate by the patient.	
Guendelman et al., 2000 <sup>7</sup>	Adult women (n=59) participating in a longitudinal study of Aid to Families with Dependent Children (AFDC), who were initially recruited from a randomly selected list of household heads	What perceptions do women have of interactions with the medical systems when accessing contraception? What are the different perceptions of Spanish-speaking Latina, English-speaking Latina and white non-Latina participants?	Participants desired detailed and personalized information from providers. Participants were especially concerned about method side effects and desired information in this area, and disliked counseling in which they felt pressure to use specific methods.	Level III, descriptive (mixed methods, focus groups and questionnaires)
Funding: The Office of Family Planning in the CA DHS, the CA DSS and the Center for Latino Policy Research at University of California, Berkeley	Years of data collection: 1996			Strengths: Relatively large sample size; recruitment originated from random sampling design in larger study
Location: Three counties in California	Age distribution: 21–43 years			Limitations: Limited ability to draw comparisons between different groups due to small sample size in each group; little exploration of counseling preferences.
	Race/Ethnicity/Language: 32% Latina Spanish-speaking, 36% Latina English-speaking, 32% white non-Latina English-speaking			Generalizability: Low
Hickey and White, 2015 <sup>43</sup>	Female college students (n=24) who had purchased EC	What are the perceptions and experiences of college women regarding receipt of over-the-counter emergency contraception?	Participants emphasized the importance of confidentiality and said they would not use campus health services if the reason for their visit would not remain confidential.	Level III, descriptive (qualitative focus groups)
Funding: The Adelphi University Faculty Development program	Years of data collection: 2009			Strengths: Multiple recruitment methods (flyer and snowball sampling)
Location: Tri-state area of Northeast U.S.	Age distribution: 19–24 years			Limitations: Convenience sample; as only previous users of EC were included, barriers and preferences were not explored among students who had not

**Appendix**  
**Client Preferences for Contraceptive Counseling: A Systematic Review**  
**Fox et al.**

	Race/Ethnicity: White 83%, Black 13%, Latina 4%			previously accessed EC; some participants previously knew lead professor, possibly influencing discussion
Johnson et al., 2015 <sup>36</sup>	Adolescent women (n=20) who had experienced pregnancy and were seeking reproductive health care	What are the perspectives of adolescents who had experienced pregnancy on family planning services at a community health center?	Participants wanted providers with good communication skills who were patient, understanding, trustworthy, and non-judgmental. A barrier to seeking contraception from a provider was fear of disapproval or judgment.	Generalizability: Low Level III, descriptive (mixed methods, surveys and interviews)
Funding: NR	Years of data collection: 2009			Strengths: Rich data collection on the perspectives of young women who had experienced pregnancy
Location: Boston, Massachusetts	Age distribution: 16–20 years			Limitations: Small convenience sample
	Race/Ethnicity: NR, but clinic described as serving primarily black and Hispanic clients			Generalizability: Low
Lowe, 2005 <sup>26</sup>	Women (n=22) receiving care at a general practice for surgery and a family planning clinic	What is the nature of the complex power relationships affecting women's contraceptive decisions?	Participants valued provider trust as a component of the contraceptive decision making process. They preferred family planning clinics to a general surgery clinic because of the focus on women's care, and preferred seeing female providers because of their perceived embodied knowledge about contraception.	Level III, descriptive (qualitative interviews)
Funding: ESRC	Years of data collection: NR			Strengths: Rich data collection; analysis informed by history and theory related to medicalization of contraception and power dynamics in family planning care
Location: Coventry, England	Age distribution: 30–39 years			Limitations: Small homogenous convenience sample, including limited age distribution
	Race/Ethnicity: Percentages NR; mostly white			Generalizability: Low

**Appendix**  
**Client Preferences for Contraceptive Counseling: A Systematic Review**  
**Fox et al.**

Marshall et al., 2017 <sup>24</sup>	Women (n=21) seeking contraceptive care	What are patients' perceptions of the value of a contraceptive decision support tool?	Participants found the decision support tool to be valuable because it provided relevant information and facilitated their decision making process by starting the process of narrowing down the contraceptive options. Participants felt the tool could prepare them for a visit with their healthcare provider by helping to identify questions for their provider.	Level III, descriptive (qualitative interviews)
Funding: NR	Years of data collection: 2014–2015			Strengths: Rich data collection on client interaction with a decision support tool
Location: Oakland, California	Age distribution: 18–29 years			Limitations: Small convenience sample; participants not necessarily seeking contraception initiation or method-change, so evaluation of the tool is hypothetical
	Race/Ethnicity: Majority (86%) non-Hispanic black or Hispanic/Latina; other races/ethnicities NR			Generalizability: Low
Matulich et al., 2014 <sup>28</sup>	Women (n=199) presenting for first-trimester surgical abortion	Do women presenting for a first-trimester abortion want to discuss contraception on the day of their procedure? If so, what information are they interested in learning about?	More than half (64%) of participants did not want to receive contraceptive counseling on the day of their abortion. About half of these participants reported they did not want counseling because they already knew what they wanted to use for contraception as the reason.	Level III, descriptive (quantitative surveys)
Funding: SFP; Ibis Reproductive Health	Years of data collection: 2012–2013			Strengths: Anonymous data collection on sensitive topic
Location: Northern California	Age distribution: 18–31 years			Limitations: No response rate ascertained; potential for response bias unknown; brief survey with little opportunity for depth on the topic; recruitment at a single site
	Race: Caucasian 63%, African American 13%, Asian 5%, Native American 4%, other 1%, unanswered 5%			Generalizability: Low
	Ethnicity: not Hispanic 75%, Hispanic 16%, unanswered 9%			

**Appendix**  
**Client Preferences for Contraceptive Counseling: A Systematic Review**  
**Fox et al.**

Mollen et al., 2013 <sup>29</sup>	Adolescents (n=223) seeking care in children's EDs	What are adolescents' preferences for the delivery of ED-based education on EC, specifically in terms of who delivers the education, length, and context of the appointment?	Participants preferred education delivered from a person, rather than from videos, written materials, or something on a computer. They particularly preferred getting information from a doctor or nurse, rather than a peer educator. They also preferred education directed at patients seeking care in the ED for complaints potentially related to sexual activity, rather than for injuries or illnesses not related to sexual health.	Level III, descriptive (quantitative surveys)  Quality: Level III  Strengths: Multiple recruitment locations; survey had been pilot tested with adolescents prior to use; computerized module for standardized survey administration  Limitations: High refusal rate (50%)  Generalizability: Low
Funding: The Nicholas Crognale Chair of Emergency Medicine at the Children's Hospital of Philadelphia	Years of data collection: 2008–2009			
Location: Philadelphia, Pennsylvania	Age distribution: 15–17 years			
	Race/Ethnicity: African American 70%, white 20%, Hispanic 5%, mixed race 5%, Asian 0.04%			
Peremans et al., 2000 <sup>27</sup>	17-year-old girls (n=26) attending secondary schools	What are the needs and expectations of adolescents with regard to accessing contraceptive services? What are their attitudes towards their healthcare providers?	Participants preferred to seek care from their general practitioner, rather than at school health centers, due to pre-existing relationships. They most often seek contraceptive care from their general practitioner. Confidentiality, adequate consultation time, and easy accessibility were important to participants.	Level III, descriptive (qualitative focus groups)  Strengths: Focus on the needs of adolescents  Limitations: Focus group participants were classmates and knew each other, likely influencing discussion; sampling was based on selection of classes by school principals  Generalizability: Low
Funding: NR	Years of data collection: 1996			
Location: Antwerp, Belgium	Age distribution: 17 years			
	Race/Ethnicity: NR			
Pilgrim et al., 2014 <sup>34</sup>	Women (n=748) receiving Title X services for the first time	What are factors associated with first-time Title X patients' perceptions of quality of care	Clients who reported the provider primarily made the decision about the birth control method had significantly lower odds of agreeing they received high quality care (AOR 0.14),	Level II-2, correlational (quantitative survey)  Strengths: Relatively large sample; regimented survey administration
Funding: The Office of Public	Years of data collection: 2008–2009			

**Appendix**  
**Client Preferences for Contraceptive Counseling: A Systematic Review**  
**Fox et al.**

Health and Science	Age distribution: mean age 24 years	and satisfaction with services?	compared with clients who made the decision themselves. Clients who were not counseled with visual aids during their visits had significantly lower odds of agreeing they received high quality care, compared with those counseled using visual aids (AOR 0.25).	Limitations: Potential sampling bias, as clinics self-selected to participate in study may have perceived own ability to score highly; potential for social desirability bias in patient responses
Location: Three states (unspecified) in the U.S.	Race/Ethnicity: Hispanic 33%, black 29%, white 24%			Generalizability: Moderate
Rubin et al., 2016 <sup>24</sup>	Adolescents (n=27) who had chosen to use the IUD	What are adolescent and young adults' priorities, values, and preferences for care affecting the choice to use an IUD?	Participants described their healthcare provider to be the most influential person in their decision to use an IUD. Participants valued receiving accurate and reliable information from providers, as well as seeing a visual model of IUD insertion. They also valued trusting relationships with their providers.	Level III, descriptive (qualitative interviews)
Funding: NIH, NICHD	Years of data collection: 2013–2014			Strengths: Rich data collection
Location: Bronx, New York	Age distribution: 16–25 years			Limitations: Small sample from one clinic; non-IUD users and those who did not arrive to appointments not included
	Race/Ethnicity: Latina 56%, other races/ethnicities NR			Generalizability: Low
Sangraula et al., 2016 <sup>25</sup>	Adolescents (n=18) receiving care at SBHCs	What are adolescents' perceptions of services to inform specific strategies for improving LARC services at 3 SBHCs?	Participants desired to receive detailed information, particularly information to correct misconceptions. They also expressed a need not to be overwhelmed by too much information. Participants highly valued autonomy in the decision making process and trusting relationships with providers with the assurance of confidentiality. The need for confidentiality led participants to prefer verbal communication	Level III, descriptive (qualitative interviews)
Funding: NR	Years of data collection: NR			Strengths: Rich data collection; interviews conducted until saturation of themes reached
Location: Upper Manhattan and Bronx, New York	Age distribution: 15–19 years			Limitations: Small convenience sample based on which students receiving survey were able to be reached over summer months
	Race/Ethnicity: NR			Generalizability: Low

**Appendix**  
**Client Preferences for Contraceptive Counseling: A Systematic Review**  
**Fox et al.**

			of contraceptive information over written forms of information.	
Schwarz et al., 2013 <sup>38</sup>	Women (n=198) seeking acute care in urgent care settings	What is the acceptability and feasibility of a computerized program for contraceptive counseling?	Most participants who used the program responded at 3 months that they would prefer to talk to a healthcare provider about their contraceptive choice, as opposed to the computerized program. Nevertheless, most participants (95%) said the program was easy to use, and 85% would recommend it to a friend.	Level III, descriptive (quantitative, survey)
Funding: SFP, CHCF, HRSA Maternal and Child Health Research Program	Years of data collection: 2011			Strengths: Provides information on client acceptability of an intervention tested in an RCT to effect contraceptive knowledge
Location: Western Pennsylvania	Age distribution: 18–45 years			Limitations: Little exploration of acceptability of computerized program
	Race/Ethnicity: black 29%, white 65%, other 11%			Generalizability: Low
Soleimanpour et al., 2010 <sup>37</sup>	Adolescents receiving care at school health centers (n=286 for quantitative sample and n=105 for qualitative sample)	What is the role of school health centers in healthcare access and client outcomes?	Focus groups revealed that students felt school health centers improved access to counseling and family planning services. Students liked the assurance of confidentiality at the centers as well as the youth-friendliness of staff.	Level III, descriptive (mixed methods, survey and focus groups)
Funding: Alameda County Health Care Services Agency	Years of data collection: 2007–2008			Strengths: In-depth mixed methods data collection at multiple sites; large sample size
Location: Alameda County, California	Age distribution: not specified			Limitations: Minimal exploration of the counseling dynamic
	Race/Ethnicity: non-Hispanic African American 33%, Hispanic 26%, Asian/Pacific Islander 16%, non-Hispanic white 10%, biracial or multiracial 5%, other 4%, missing 6%			Generalizability: Low

**Appendix**  
**Client Preferences for Contraceptive Counseling: A Systematic Review**  
**Fox et al.**

Sonenstein et al., 1995 <sup>31</sup>	Women (n=1,093) who had received reproductive health care	What are women's experiences with and preferences for reproductive health care?	Participants preferred to receive care at private physicians' offices as opposed to family planning and other clinics.	Level III, descriptive (quantitative survey)  Strengths: Large sample size  Limitations: Lack of clarity on classification of different healthcare sites  Generalizability: Moderate
Funding: The Henry J. Kaiser Family Foundation	Years of data collection: 1993			
Location: U.S.	Age distribution: 28–40 years			
	Race/Ethnicity: NR			
Weisman et al., 2002 <sup>33</sup>	Women (n=898) who had received contraceptive counseling in managed care	What is the relationship between counseling and women's contraceptive attitudes and practices?	Participants who reported receiving personalized counseling (as opposed to no counseling or only informational counseling) had significantly higher odds of increased satisfaction with counseling (OR 3.1 personalized counseling compared with no counseling, versus OR 1.5 informational counseling compared with no counseling).	Level II-2, correlational (quantitative survey)  Strengths: Large sample size  Limitations: Potential recall bias in data related to receipt of counseling, due to data being collected on appointments that occurred up to 2 years prior  Generalizability: Moderate
Funding: NR	Years of data collection: NR			
Location: Michigan	Age distribution: 18–44 years			
	Race/Ethnicity: Among participants at risk for unintended pregnancy: African American 8%, Asian 4%, white/ non-Hispanic 83%, Hispanic 2%, other 3%; among those not at risk for unintended pregnancy: African American 5%, Asian 1%, white/non-Hispanic 90%, Hispanic 3%, other 1.1%			

**Appendix**  
**Client Preferences for Contraceptive Counseling: A Systematic Review**  
**Fox et al.**

Yee and Simon, 2011a <sup>38</sup>	Women (n=30) receiving prenatal care in an ambulatory outpatient clinic	What are women's preferences for the provision of contraceptive counseling in the prenatal and postpartum periods?	Participants preferred frequent, short, comprehensive, and patient-centered counseling throughout prenatal care and into the postpartum period.	Level III, descriptive (qualitative interviews)
Yee and Simon, 2011b <sup>17</sup>	Years of data collection: 2007–2008	What are negative contraception counseling experiences as described by women of color living in an urban setting?	Participants preferred that providers initiate counseling to help reinforce decision making throughout prenatal and postpartum care.	Strengths: Rich data collection Limitations: Small convenience sample
Funding: NIH	Age distribution: 19–35 years			Generalizability: Low
Location: Chicago, Illinois	Race/Ethnicity: Hispanic 37%, African American 63%		Counseling experiences considered negative included feeling ignored or receiving impersonal counseling. Participants reported feeling coerced when their contraceptive choice differed from their providers' recommendations. Some participants reported feeling racially discriminated against during their counseling.	
Yee et al., 2015 <sup>30</sup>	Women seeking antenatal/postpartum care (n=57)	What are the preferences of underserved pregnant and postpartum women regarding contraception use and counseling?	Most participants (84%) reported that the best time to receive contraceptive counseling was both before and after childbirth.	Level III, descriptive (quantitative survey)
Funding: NR	Years of data collection: NR			Strengths: Relatively large sample size for qualitative study
Location: Chicago, Illinois	Age distribution: 21–31 years			Limitations: Limited exploration of client preferences (e.g., preferred timing during pregnancy)
	Race/Ethnicity: African American 64%, Hispanic 24%, Asian 9%, white 4%			Generalizability: Moderate

**Appendix**  
**Client Preferences for Contraceptive Counseling: A Systematic Review**  
**Fox et al.**

<sup>a</sup>USPSTF hierarchy of research design: Level I: properly powered and conducted RCT; well-conducted systematic review or meta-analysis of homogeneous RCTs. Level II-1: well-designed controlled trial without randomization. Level II-2: cohort or case-control analytic study. Level II-3: multiple time series with or without an intervention; dramatic results from uncontrolled experiments. Level III: opinions of respected authorities, based on clinical experience; descriptive studies or case reports; reports of expert committees.

<sup>b</sup>Though the publication year is 2017, the article was identified in the search of literature published prior to November 30, 2016 due to early online availability.

CA DHS, California Department of Health Services; CA DSS, California Department of Social Services; CHCF, California Health Care Foundation; EC, emergency contraception; ED, emergency department; ESRC, Economic and Social Research Council; GFEF, Global Field Experience Fund; HRSA, Health Resources & Services Administration; IUD, intrauterine device; JHSPH, Johns Hopkins Bloomberg School of Public Health; LARC, long-acting reversible contraception; NCATS, National Center for Advancing Translational Sciences; NCCR, National Center for Research Resources; NICHD, National Institute of Child Health and Human Development; NR, not reported; PCP, primary care provider; RWJF, Robert Wood Johnson Foundation; SBHC, Schools Based Health Center; SFP, Society of Family Planning; UCSF-CTSI, University of California, San Francisco, Clinical & Translational Science Institute; USPSTF, United States Preventive Services Task Force