Volume 65, Number 5
OBSTETRICAL AND GYNECOLOGICAL SURVEY

CME REVIEW ARTICLE 13

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Postpartum Education for Contraception: A Systematic Review

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Contraceptive education is generally considered a standard component of postpartum care, but the effectiveness is seldom examined. Two-thirds of postpartum women may have unmet needs for contraception, and many adolescents become pregnant again within a year of giving birth. Women may prefer to discuss contraception prenatally or after hospital discharge. The objective of this systematic review was to assess the effects of educational interventions for postpartum mothers about contraceptive use. We searched computerized databases for randomized controlled trials that evaluated the effectiveness of postpartum contraceptive education. The intervention must have started within 1 month after delivery. The Mantel-Haenszel odds ratio was calculated with 95% confidence interval for the dichotomous outcomes. Eight trials met the inclusion criteria. Of 4 short-term interventions, 1 did not have sufficient data and 1 was statistically underpowered. The remaining 2 showed a positive effect on contraceptive use. Of 4 multifaceted programs, 2 showed fewer pregnancies or births among adolescents in the experimental group that had enhanced services, and 1 structured home-visiting program showed more contraceptive use. The effective interventions were conducted in Australia, Nepal, Pakistan, and the United States. Postpartum education about contraception led to more contraception use and fewer unplanned pregnancies. Short-term interventions were limited by self-reported outcomes or showing no effect for many comparisons. The longer-term programs were promising and not necessarily more costly than usual care. Health care providers can determine if 1 of these interventions suits their setting and level of resources.

Target Audience: Obstetricians & Gynecologist, Family Physicians

Learning Objectives: After completing this educational activity, the participant should be better able to assess the importance of assessing delivery methods when examining intervention quality, evaluate the evidence from randomized trials on the effectiveness of postpartum education, and employ why additional research on postpartum education is needed for improving clinical practice.

Unless otherwise noted below, each faculty's spouse/life partner (if any) has nothing to disclose.

The authors have disclosed that they received financial funding from the US Agency for International Development and the National Institute of Child Health and Human Development (USA).

The Faculty and Staff in a position to control the content of this CME activity have disclosed that they have no financial relationships with, or financial interests in, any commercial companies pertaining to this educational activity.

This article is based on a Cochrane Review (Lopez LM, Hiller JE, Grimes DA. Education for contraceptive use by women after childbirth. Cochrane Database Syst Rev 2010:CD001863). Cochrane reviews are regularly updated as new evidence emerges and in response to feedback, and The Cochrane Library should be consulted for the most recent version of the review.

From Family Health International, Mario Chen provided statistical consultation on cluster randomized trials, and Carol Manion searched the electronic databases.

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The provision of contraceptive education is generally considered a standard component of postpartum care. Education is frequently provided as part of discharge planning, but many women experience a perfunctory discussion in a checklist of topics (1). Midwifery and obstetric texts routinely refer to such education as a responsibility in postpartum care, but the effectiveness is seldom questioned (2,3). Postpartum contraception counseling is often limited to a single encounter, which is unlikely to affect behavior. Further, decisions made right after counseling may differ considerably from contraceptive use postpartum (4). As common as postpartum contraceptive education has become, research to evaluate such interventions is still sparse (5). We know more about contraceptive methods appropriate for postpartum women (5,6) than we do about what works to help postpartum women choose a contraceptive.

In 1966, the Population Council sponsored demonstration projects on postpartum family planning, focusing primarily on developing countries, and including 25 hospitals in 14 countries (7). These projects were based on the assumptions that women are receptive to family planning education in the postpartum period and that they will not return to health centers for contraception once they have been discharged from the hospital. The demonstration projects were considered a success given their ability to reach large numbers of women, and were expanded to hospitals in 21 countries (8). Randomized controlled trials (RCTs) were not used to assess program effectiveness.

Unmet need for contraception education has been widely documented. Demographic and Health Surveys in 27 countries indicate that two-thirds of postpartum women had unmet needs for contraception (9). The Matlab project examined the effect of experimental programs for maternal and child health and family planning in a rural area in Bangladesh (10). Intensive provision of family planning services resulted in increased uptake of contraceptives. Adolescents are a particular concern, given the frequency of repeat pregnancies within a year of giving birth (11). The appropriate time and place for such education may vary. Postpartum women may wish to discuss contraception prenatally or after hospital discharge, preferably in the context of general education about maternal and child health (1,5,12). The mother's attention may be more focused on the newborn than on herself.

Our systematic review examined RCTs of postpartum interventions to educate women about contraceptive choices. The primary objective was to determine the effectiveness of such educational interventions on unplanned pregnancies; contraceptive knowledge, attitudes, and practices; breast feeding behavior; and satisfaction with care. After completing this CME activity, the reader should be better able to critique the evidence from trials on the effectiveness of postpartum contraceptive education, and assess the importance of delivery methods for intervention effectiveness. The reader should also be able to propose ideas for research on postpartum education to improve clinical practice.

METHODS

RCTs were considered if they examined postpartum education about contraceptive use, whether delivered to individuals or to groups of women. We excluded trials focused solely on the needs of women with alcohol or drug problems or with chronic health conditions such as HIV or diabetes.

Trials were included if they evaluated postpartum education provided to influence uptake of contraception including lactational amenorrhea. Educational interventions may have been based on written materials, video, or audio recordings, or individual or group counseling. The intervention must have started postpartum and within 1 month of delivery. The primary outcomes were unplanned pregnancies and choice or use of contraception. Trials had to have 1 of these primary outcomes to be included. Secondary outcomes included knowledge about contraception, breast feeding, and satisfaction with postnatal care.

We conducted searches of MEDLINE, Cochrane Central Register of Controlled Trials (CENTRAL), EMBASE, POPLINE, CINAHL, and PsycINFO. We also searched for current trials through the internet site of www.ClinicalTrials.gov and ICTRP. Details of the search strategies are available from the first author. A sample strategy for CENTRAL follows: contracept* OR family planning in Title, Abstract, or Keywords AND counsel* OR communicat* OR educat* OR information disseminat* OR intervention OR choice OR choose OR use in Title, Abstract or Keywords AND postpartum OR postpartum OR postnatal in Title, Abstract, or Keywords. In addition, reference lists of relevant articles were examined for additional citations. We also contacted investigators in the field to seek unpublished trials or published trials we may have missed in our searches.

Data Collection and Analysis

One author reviewed the search results, abstracted the data, and entered the information into the RevMan software (13). A second author examined the reports identified for appropriate categorization, con-

ducted the secondary data abstraction, and verified correct data entry. Any discrepancies were resolved by discussion. We excluded studies that appeared to randomize clusters rather than individuals if they did not account for the clustering in the analysis.

We extracted information on the intervention using a tool to assess fidelity (14). The most pertinent categories were in the intervention design, that is, "treatment dose" for the study groups and implementation fidelity (e.g., training of providers and quality assurance). The dose information is similar to what is usually extracted for pharmacologic interventions, and includes the content as well as the length and number of educational sessions (rather than pills) (Table 1). Information on implementation fidelity was synthesized if provided in the trial report (Table 2). Included trials were evaluated for methodological quality in accordance with recommended principles (23). Factors considered included randomization method, allocation concealment, blinding, and losses to follow-up and early discontinuation. Methodological issues identified are summarized with the study characteristics (Table 1).

For the dichotomous outcomes, the Mantel-Haenszel odds ratio (OR) with 95% confidence interval (CI) was calculated using a fixed-effect model. An example is the proportion of women who initiated use of a particular contraceptive method. Fixed and random effects give the same result if no heterogeneity exists, as when a comparison includes only 1 study. No meta-analysis was conducted due to the differences across interventions.

RESULTS

Eight trials met our inclusion criteria (Table 1). A total of 3017 women participated in these trials, ranging from 33 to 904 per trial (median = 286). The studies were conducted in Australia, Nepal, Pakistan, Syria, and the United States (N = 4). The studies done in the United States included 786 patients at 6 urban hospitals. Three of the 8 trials focused on adolescents (<18 years) (16,19,21) and 1 on young women (≤25 years) (18). All reports had some information regarding intervention fidelity (Table 2). Most used clinicians to provide the education and most had some intervention training for the providers. All reports had information on the intervention content or its development.

Outcomes included pregnancy and contraceptive use. Four trials reported on repeat pregnancy or second birth. Six assessed contraceptive use, but only 5 had data for analysis in this review. Only 1 did not have any follow-up after discharge (20). Risk of bias was assessed, and methodological concerns were summarized (Table 1). Five trials provided information on sequence generation and used sealed envelopes to conceal the allocation (15,17,18,20,21). Blinding of assignment was not possible in most trials, given the nature of the interventions. However, the outcome assessors were blind to allocation group in 3 trials (15,17,22). Research team members were reportedly blinded in 1 trial (18).

The content and format of the education varied. Three trials emphasized contraception and provided 1 session before discharge. The control group had no educational intervention in 1 of those trials (22). The other 2 trials had routine or alternative care as the comparison (18,20). Five trials addressed additional health education or parenting issues as well as contraception. Three of these involved multiple home visits (15,16,21), 1 had multiple clinic contacts (19), and 1 provided a session in the hospital and a second session at home (17). We grouped the trials according to whether the intervention was short-term counseling or had multiple contacts.

Short-Term Counseling

The interventions in 4 trials were limited to 1 or 2 contacts. In Bolam et al (17), 2 of the 4 study arms had health education during their postpartum hospital stay. The other 2 arms did not have any within the 1-month timeframe we specified for inclusion in this review. Therefore, we first compared those with and without a health education session during their postpartum stay. The groups were similar at 3 months; but at 6 months, the group with the immediate postpartum session was more likely to use contraception than the group with no immediate session (OR: 1.62; 95% CI: 1.06–2.50). We also compared the arms from those groups at 6 months, as 3-month data were not available. The group with 2 sessions was similar to the group with 1 immediate session. In addition, the group with 1 immediate session did not differ substantially from the group with no educational session; family planning was not emphasized in the immediate session. The study arms did not differ in breast-feeding for any of the comparisons, even although exclusive breast-feeding was emphasized in the immediate session.

The experimental and comparison groups in Gilliam et al (18) were similar in the proportions that continued oral contraceptive use at 1 year and those who switched the type of contraceptive used. Pregnancies were also similar in the 2 groups. However, the power to detect differences was limited since the sample sizes were small.

Proctor et al (20) examined contraceptive choice before discharge, but did not provide sufficient data for

TABLE 1.
Characteristics of included studies

Study	N	Target Group and Program Focus	Location	Interventions and Comparison Groups	Methodological Quality Issues
Bashour et al (15)	903	Women who had recently given birth; postpartum education and support	Maternity teaching hospital in Damascus, Syria	1) 4 home visits on days 1, 3, 7, 30 following delivery 2) Visit on day 3, similar to visit to group 1 3) Standard of care in Syria—no visit after discharge	
Black et al (16)	181	African-American adolescents, first-time mothers; parenting and contraception	3 urban hospitals in Baltimore, MD (USA)	1) Home-based curriculum; twice per month up to 19 lessons 2) Usual care	No information on randomization sequence generation, allocation concealment, or blinding; excluded participants after randomization due to missing data
Bolam et al (17)	540	Women who gave birth in hospital; education on infant health as well as contraception	Public maternity hospital in Kathmandu, Nepal	One-to-one 20-min health education session 1) Health education immediately after birth and at 3 months 2) Health education immediately after birth 3) Health education at 3 months 4) No health education	High loss to follow-up: 25% at 3 months and 27% at 6 months
Gilliam et al (18)	33	African-American women in hospital after delivery; oral contraceptive adherence	Hospital in Chicago, IL (USA)	1) Multi-component intervention: counseling, videotape about OCs, and written material 2) Resident-physician counseling (usual care). Intervention was one-time, postdelivery	High loss to follow-up: 52% by 1 yr
O'Sullivan and Jacobsen (19)	243	Postpartum teenagers; well-baby care	Urban teaching hospital in eastern USA	1) Special care 2) Routine well-baby care	No information on randomization sequence generation, allocation concealment, or blinding
Proctor et al (20)	329	Women in hospital after delivery; contraception counseling	Medical center in Charlotte, NC (USA)	Contraceptive counseling on postpartum day 1 1) Video presentation (20-min) 2) Educational literature with same content as video 3) Physician-patient counseling session (similar content to other methods but not scripted)	No information on blinding; excluded participants after randomization due to missing data; one dichotomous item used to assess satisfaction, the primary outcome
Quinlivan et al (21)	139	Teenagers, first-time mothers; postnatal support and counseling	Clinic in Australia	Routine postnatal support, counseling, and information with access to routine home-visiting. Experimental group also had structured home visits (1–4 h each) from nurse midwives at week 1 and 2 and at months 1, 2, 4, and 6	No information on blinding
Saeed et al (22)	648	Women in labor ward; contraception counseling	Hospital in Islamabad, Pakistan	1) Informal contraceptive counseling (20 min); didactic approach with time for questions 2) No counseling or pamphlet provided	No information on allocation concealment

TABLE 2.
Intervention fidelity

Study	Provider Credentials	Provider Training	Standardized Delivery
Bashour et al (15)	Registered midwives	5 d of special training	Objectives listed for each visit. Breastfeeding was addressed in visits 2 and 3; family planning in visit 4
Black et al (16)	2 Black women, college-educated, in their 20s, single mothers and living independently	"Extensive" training was provided	Curriculum with 19 lessons; order could vary after 2 sessions. Weekly supervisory sessions
Bolam et al (17)	3 health educators, 2 midwives, 1 community health worker	Providers "trained" to give the health education	Format and content identified for sessions, including key messages. Investigators monitored weekly and provided feedback
Gilliam et al (18)	Resident physicians plus nurses for additional counseling	Training session for resident physicians and nurses	Researchers developed the counseling program, video, and pamphlet for this study. Development was described
O'Sullivan and Jacobsen (19)	Director: nurse practitioner Providers: social worker, pediatrician and nurse practitioners, and volunteers	Volunteers were "trained"	Four goals and specific services identified, as well as which professionals to provide each component
Proctor et al (20)	Resident physicians	Didactic session on contraceptive methods and outline for talking points	Existing materials for 3 intervention methods were based on the same content
Quinlivan et al (21)	Certified midwives		Structured home visits outlined in report.
Saeed et al (22)	Physicians	Providers had 40-min training on leaflet and interview methods	Counseling leaflet used

analysis in this review. The results were presented in a graph without specific numbers. Reportedly, the groups were similar in their choice of contraceptive method. Satisfaction data were provided, but the results were limited because of using only one dichotomous item. Women who watched a video were less satisfied than those who had counseling from a physician (OR: 0.27; 95% CI: 0.07–0.98). The video watchers were as likely to be satisfied as those who received a pamphlet.

At 8 to 12 weeks postpartum in Saeed et al (22), all of the women in the counseling group planned to use a modern contraceptive method compared to one-third of the control group. The control group did not receive any educational information. The 95% CI was wide (OR: 1038.09; 95% CI: 64.15–6799.73). More importantly, women in the counseling group were more likely to be using contraception by 8 to 12 weeks postpartum (OR: 19.56; 95% CI: 11.65–32.83).

Programs With Multiple Contacts

Interventions in the other 4 trials involved multiple contacts, and could have been based on home or clinic visits. O'Sullivan and Jacobsen (19) focused on teenagers at a hospital in Philadelphia. The experimental group had special services provided within the well-baby clinic, including reminder contacts. The comparison group had the usual well-baby care. Teenagers in the experimental group were less likely to have a repeat pregnancy by 18 months compared with the control group (OR: 0.35; 95% CI: 0.17–0.70). The difference in pregnancies was largely within the subgroup of clinic dropouts: 32% of the control group had a repeat pregnancy versus 15% in the experimental group.

Black et al (16) evaluated second births among adolescents during home visits in Baltimore. The experimental group had multiple home visits over 2 years, whereas the controls had usual care. The mean number of intervention visits was 6.63 ($\pm$6.58). The adolescents in the treatment group were less likely to have had a second birth within 2 years than the usual care group (OR: 0.41; 95% CI: 0.17–1.00).

For Quinlivan et al (21), women in the experimental group were more likely to have effective contraceptive use at 6 months than the comparison group (OR: 3.24; 95% CI: 1.35–7.79). Women in the experimental group had a structured home-visiting program as opposed to standard home visits. We did not have sufficient data to analyze contraceptive knowledge. The reported mean difference in contraceptive knowledge at 6 months favored the experimental group (mean difference: 0.92 points; 95% CI: 0.32–1.52).

The experimental group in Bashour et al (15) had up to 4 home visits, with the last visit focusing on family planning. A second group had 1 visit, while a control group had none (the standard of care in Syria). At 4 months, women in the study groups were similar for pregnancy and contraceptive use.

DISCUSSION

Of the 4 short-term interventions, 1 study did not have the statistical power to detect differences (18), and 1 did not have sufficient data on contraceptive use for analysis here (20). The remaining 2 showed a positive effect on contraceptive use (17,22). The experimental groups had some contraceptive counseling in the immediate postpartum period while the comparison group did not. All of these outcome measures were based on self-report. In addition, in Bolam et al (17), only 1 of 4 contraceptive outcome measures showed a positive effect, and the groups were similar for the exclusive breast-feeding comparisons. For Saeed et al (22), use of contraceptive method was only assessed at 8 to 12 weeks.

Of the 4 programs with multiple contacts, 3 had a positive effect on pregnancy or contraceptive use. Family planning education in these studies was integrated with other health education or health services. The 2 programs that focused on adolescents showed fewer repeat pregnancies or births within the experimental group (16,19). The experimental groups in both trials had enhanced services compared to the controls. Black et al (16) assessed second births during home visits. Pregnancy in O'Sullivan and Jacobsen (19) was based on self-report in clinic, but the researchers assessed other outcomes with independent sources, such as school attendance (for the teenager returning to school) and child immunization via chart audits. In Quinlivan et al (21), the structured home-visiting program had an effect on contraceptive use in favor of the experimental group. The control group had standard home visits. The researchers attempted to verify self-reports against an independent source, including pill packets and prescriptions (clinic or physician) (21). No significant differences were found in Bashour et al (15), which provided up to 4 home visits in a 30-day period for the experimental group.

Only O'Sullivan and Jacobsen (19) addressed the cost of the intervention. Both groups received well-baby care in the clinic. The hospital estimated the cost per visit to be lower for the experimental group than the control. The difference was attributed to several factors, including combining services and

not using medical residents who would need faculty supervision.

The included trials represented various types of postpartum educational interventions, that is, short-term and multiple-contact interventions. Several were provided during the postpartum hospital stay, while others began 2 or 3 weeks later. Unfortunately, 2 trials contributed little to this review, given insufficient data or an inadequate sample size. Of the 5 trials showing positive effects, 2 were conducted in the United States, and the others were from Australia, Nepal, and Pakistan.

All reports provided some documentation of intervention content and most had implementation information. Of 8 trials, 5 had some allocation concealment, a higher proportion than those found in many reviews. Only 4 mentioned some type of blinding, and 2 had high losses to follow-up. However, losses were not as high overall as some trials in contraceptive education (24), in part due to the short-term nature of several interventions.

CONCLUSIONS

Postpartum contraceptive education may increase contraceptive use and decrease unplanned pregnancies. While intensive interventions are more likely to make a difference, some short-term counseling showed an effect in these studies. However, the latter were limited by self-reported outcomes, short-term assessments, or showing no effect for many comparisons. Researchers should consider validating outcome measures, and then examine different short-term interventions in randomized controlled trials. The longer-term interventions were promising and some researchers verified self-reported data with other sources. One estimated the cost to be lower than that of usual well-baby care. All the trials provided information on the intervention content and intensity, although the reporting on delivery was limited. Healthcare providers can test in their own environment the programs that appear to be appropriate for their population, location, and resources. Our review highlighted the relatively sparse data from randomized controlled trials in this important area of contraception education. We hope it will stimulate additional study of this clinical opportunity for patient education.

REFERENCES

1. Glasier AF, Logan J, McGlew TJ. Who gives advice about postpartum contraception? Contraception 1996;53:217–220.
2. Keith I, Berger G. Control of reproduction in the puerperal state. In: Aladjem S, ed. Obstetrical Practice. St Louis, MO: CV Mosby Company, 1980.
3. Semeraro P. Postpartum family planning services: challenges for the future. In: Murray S, ed. Midwives and Safer Motherhood. London, United Kingdom: Mosby, 1996:79–88.
4. Engin-Üstün Y, Üstün Y, Cetin F, et al. Effect of postpartum counseling on postpartum contraceptive use. Arch Gynecol Obstet 2007;275:429–432.
5. Family Health International. Quick Reference Guide to Family Planning Research. 2009. Available at: http://www.fhi.org/en/RH/Programs/RtoP/FP_Research_Guide/index.htm. Accessed November 23, 2009.
6. Shaw E, Kaczorowski J. Postpartum care—what's new? Curr Opin Obstet Gynecol 2007;19:561–567.
7. Zatuchni G. Postpartum Family Planning: A Report on the International Program. New York, NY: McGraw-Hill, 1970.
8. Winikoff B, Mensch B. Rethinking postpartum family planning. Stud Fam Plann 1991;22:294–307.
9. Ross J, Winfrey W. Contraceptive use, intention to use and unmet need during the extended postpartum period. Int Fam Plan Perspect 2001;27:20–27.
10. Koenig MA, Rob U, Khan MA, et al. Contraceptive use in Matlab, Bangladesh in 1990: levels, trends, and explanations. Stud Fam Plann 1992;23:352–364.
11. Thurman AR, Hammond N, Brown HE, et al. Preventing repeat teen pregnancy: postpartum depot medroxyprogesterone acetate, oral contraceptive pills, or the patch? J Pediatr Adolesc Gynecol 2007;20:61–65.
12. Ozvaris S, Akin A, Yildiran M. Acceptability of postpartum contraception in Turkey. Adv Contracept Deliv Syst 1997;13:63–71.
13. Cochrane Collaboration. RevMan home page. Available at: http://ims.cochrane.org/revman. Accessed December 9, 2009.
14. Borrelli B, Sepinwall D, Ernst D, et al. A new tool to assess treatment fidelity and evaluation of treatment fidelity across 10 years of health behavior research. J Consult Clin Psychol 2005;73:852–860.
15. Bashour HN, Kharouf MH, Abdulsalam AA, et al. Effect of postnatal home visits on maternal/infant outcomes in Syria: a randomized controlled trial. Public Health Nurs 2008;25:115–125.
16. Black MM, Bentley ME, Papas MA, et al. Delaying second births among adolescent mothers: a randomized, controlled trial of a home-based mentoring program. Pediatrics 2006;118:e1087–e1099.
17. Bolam A, Manandhar DS, Shrestha P, et al. The effects of postnatal health education for mothers on infant care and family planning practices in Nepal: a randomised controlled trial. BMJ 1998;316:805–811.
18. Gilliam M, Knight S, McCarthy MJ. Success with oral contraceptives: a pilot study. Contraception 2004;69:413–418.
19. O'Sullivan AL, Jacobsen BS. A randomized trial of a health care program for first-time adolescent mothers and their infants. Nurs Res 1992;41:210–215.
20. Proctor A, Jenkins TR, Loeb T, et al. Patient satisfaction with 3 methods of postpartum contraceptive counseling: a randomized, prospective trial. J Reprod Med 2006;51:377–382.
21. Quinlivan JA, Box H, Evans SF. Postnatal home visits in teenage mothers: a randomised controlled trial. Lancet 2003;261:893–900.
22. Saeed GA, Fakhar S, Rahim F, et al. Change in trend of contraceptive uptake—effect of educational leaflets and counseling. Contraception 2008;77:377–381.
23. Higgins J, Green S. Cochrane handbook for systematic reviews of interventions 5.0.2. Available at: http://www.cochrane.org/resources/handbook/index.htm. Accessed September 2009.
24. Lopez LM, Tolley EE, Grimes DA, et al. Theory-based interventions for contraception. Cochrane Database Syst Rev 2009:CD007249.