

Assessment of the Effect of Combined Antenatal and Postnatal Counselling on Postpartum Modern Contraceptive Use

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Abstract

Background: Postpartum contraception is one of the means to prevent rapid repeat pregnancies to ensure good health outcomes in both mother and baby. The present study was conducted to assess the effect of combined antenatal and postnatal counseling on postpartum modern contraceptive use. **Subjects and Methods:** 124 pregnant women at more than 24 weeks of gestation were divided into 2 groups. Group I (only prenatal education group). Women in Group II were given additional contraceptive education at six weeks after hospital discharge (both antenatal and postnatal education). **Results:** Contraceptive methods used before pregnancy were modern seen in 42% and 48%, traditional in 30% and 32% and no method in 28% and 20% in group I and II respectively. After pregnancy was modern seen in 48% and 60%, traditional in 45% and 38% and no method in 7% and 2% in group I and II respectively. The difference was non-significant (> 0.05). **Conclusion:** Authors found that family planning education should be provided to all pregnant women during antenatal care. There was no improvement in methods of contraception in both groups even after pregnancy.

Keywords: Antenatal Care, Family Planning, Prenatal

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Introduction

During the last 20 years, the use of modern contraceptive methods increased from 31% to 46%. The level of traditional method use remained unchanged during the last decade. Approximately half of the contraceptive methods are male-controlled, such as coitus interruptus or condom use. In the literature, the integration of family planning education into obstetric care has been suggested to increase postpartum contraception use.^[1] The factors contributing to postpartum contraceptive use have been studied previously and include socio-demographic factors, prior experiences, obstetric care service utilisation, and antenatal-postnatal education. The differences in the time and type of educational interventions and the heterogeneity of the population have yielded diverse outcome.^[2]

Postpartum contraception is one of the means to prevent rapid repeat pregnancies to ensure good health outcomes in both mother and baby. However, in developing countries, postpartum contraceptive uptake is low.^[3] The World Health Organization estimates that about 830 women die daily from complications of pregnancy and childbirth worldwide, and

nearly all (99%) of these maternal deaths occur in developing countries.^[4] An overwhelming number of these deaths could be prevented through interventions such as the use of modern contraceptive methods. Evidence shows that an estimated 20% of obstetric deaths would be prevented if modern contraceptive methods were used. The data from the Demographic and Health Survey (DHS) in Kenya showed that ANC service intensity and previous method use were related to postpartum contraception.^[5] A study from Nigeria found that multiple antenatal contraceptive counseling sessions increased modern contraceptive use compared to a single postpartum education session.^[6] The present study was conducted to assess the effect of combined antenatal and postnatal counselling on postpartum modern contraceptive use.

Subjects and Methods

The present study comprised of 124 pregnant women at more than 24 weeks of gestation. Each participant received contraceptive education throughout her ANC. Patients were divided into 2 groups. Group I (only prenatal education group). Women in Group II were given additional contraceptive

education at six weeks after hospital discharge (both antenatal and postnatal education).

Family planning counselling was given by a nurse to all patients with their partners such as postpartum contraceptive needs, the return of fertility after childbirth, contraceptive methods, lactation, and sexual health. Postpartum Counselling such as the individualised family planning counselling at the sixth-week postpartum was performed such as sexual issues, and postpartum contraceptive methods and problem-oriented support. Results thus obtained were tabulated and analyzed statistically, with a P value less than 0.05 considered significant.

Results

[Table 1] shows that maternal age <30 years was seen in 57% in group I and 55% in group II, >30 years in 43% in group I and 45% in group II, previous births 0-1 in 35% and 45%, 2-4 in 50% and 50%, >4 in 15% and 5% in group I and II respectively, previous abortions in 0-1 in 95% and 91%, >2 in 5% and 9% in group I and II respectively, education was primary in 60% and 68% and high in 40% and 32% in group I and II respectively and 45% in group I and 40% in group II were employed. The difference was non-significant (> 0.05).

[Table 2 & Figure 1] shows that contraceptive methods used before pregnancy were modern seen in 42% and 48%, traditional in 30% and 32% and no method in 28% and 20% in group I and II respectively. After pregnancy was modern seen in 48% and 60%, traditional in 45% and 38% and no method in 7% and 2% in group I and II respectively. The difference was non-significant (> 0.05).

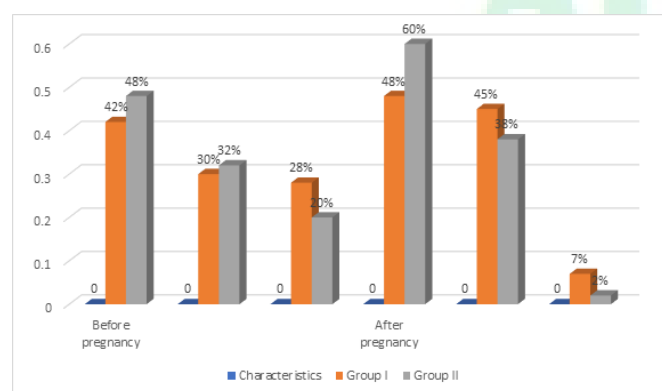


Figure 1: Comparison of contraceptive methods

Discussion

Post-partum family planning is defined by WHO as the prevention of closely-spaced pregnancies and unwanted pregnan-

cies up to 12 months after delivery when a new pregnancy presents a high risk for mothers and babies.^[7] Post-partum family planning could prevent more than 30% of maternal and 10% of infant deaths by effectively spacing birth-to-pregnancy intervals by at least 2 years and birth-to-birth intervals by at least 3 years. Therefore, post-partum family planning services aim to assist women and couples to decide on their preferred method of contraception, initiate that method, and continue use for ideally 2 years or longer, depending on their reproductive goals.^[8] Birth-to-pregnancy intervals in 50% or more of pregnancies in low-income and middle-income countries are too short (<23 months).^[9] Considering the definition that assumes that the risk of becoming pregnant restarts soon after birth and before the sixth week postpartum, and that women should use contraception even if abstinent or before the menstrual cycle resumes, unmet need for family planning reaches 65% in the east and southern Africa and 75% in the west and central Africa.^[10] The present study was conducted to assess the effect of combined antenatal and postnatal counselling on postpartum modern contraceptive use.

In the present study, maternal age <30 years was seen in 57% in group I and 55% in group II, >30 years in 43% in group I and 45% in group II, previous births 0-1 in 35% and 45%, 2-4 in 50% and 50%, >4 in 15% and 5% in group I and II respectively, previous abortions in 0-1 in 95% and 91%, >2 in 5% and 9% in group I and II respectively, education was primary in 60% and 68% and high in 40% and 32% in group I and II respectively and 45% in group I and 40% in group II were employed. Vural et al,^[11] family planning counselling was given to all participating patients throughout antenatal care (ANC) via brief communications. After delivery, the women were categorised into two age-matched groups with a 1:1 allocation ratio in the order of the birth date. No further intervention was performed for Group I (n: 98). Women in Group II (n: 102) received further contraceptive education six weeks after hospital discharge. Six months after delivery, PPMC was compared between the two groups. PPMC was similar between Group I and II (p>0.05). Previous contraceptive experiences, obstetric care service intensity and partner's support were the factors related to postnatal contraceptive use. Logistic regression analysis showed that PPMC was independent of confounding factors in each group.

We observed that contraceptive methods used before pregnancy were modern seen in 42% and 48%, traditional in 30% and 32% and no method in 28% and 20% in groups I and II respectively. After pregnancy was modern seen in 48% and 60%, traditional in 45% and 38% and no method in 7% and 2% in group I and II respectively. Tran NT et al,^[12] assessed the effect of a similar package but in urban settings of Kinshasa province, the Democratic Republic of the Congo, to reduce the unmet need for postpartum family planning. eight of 52 clinics assessed for eligibility met the criteria and were ran-

Table 1: Characteristics of participants

Characteristics	Group I	Group II	P-value
Maternal age			
<30 years	57%	55%	0.14
>30 years	43%	45%	
Previous births			
0-1	35%	45%	0.12
2-4	50%	50%	
>4	15%	5%	
Previous abortions			
0-1	95%	91%	0.02
>2	5%	9%	
Education			
Primary	60%	68%	0.17
High	40%	32%	
Employment			
Yes	45%	40%	0.19
No	55%	60%	

Table 2: Comparison of contraceptive methods

Variables	Characteristics	Group I	Group II	P-value
Before pregnancy	Modern	42%	48%	0.91
	Traditional	30%	32%	0.92
	No	28%	20%	0.94
After pregnancy	Modern	48%	60%	0.08
	Traditional	45%	38%	0.83
	No	7%	2%	0.14

domised. Of 690 women approached, 576 (83%) women were enrolled: 286 in the four intervention clusters and 290 in the four control clusters. Of them, 519 (90%) completed the 12-month study exit interview (252 in the intervention group and 267 in the control group) and were included in the intention-to-treat analysis. At 12 months, 115 (46%) of 252 women in the intervention group and 94 (35%) of 267 in the control group were using modern contraceptives (adjusted prevalence ratio [PR] 1.58, 95% CI 0.74–3.38), with significant differences in the use of contraceptive implants (22% vs 6%; adjusted PR 4.36, 95% CI 1.96–9.70), but without difference in the use of short-acting contraceptives (23% vs 28%; 0.92, 0.29–2.98) and non-modern or inappropriate methods (7% vs 18%; 0.45, 0.13–1.54). There were no serious adverse events or maternal deaths related to the study.

The limitation of the study is the small sample size.

Conclusion

Authors found that family planning education should be provided to all pregnant women during antenatal care. There was no improvement in methods of contraception in both groups even after pregnancy.

References

1. Moore Z, Pfitzer A, Gubin R, Charurat E, Elliott L, Croft T. Missed opportunities for family planning: an analysis of pregnancy risk and contraceptive method use among postpartum women in 21 low- and middle-income countries. *Contraception*. 2015;92(1):31–39. Available from: <https://dx.doi.org/10.1016/j.contraception.2015.03.007>.
2. Blencowe H, Cousens S, Jassir FB, Say L, Chou D, Mathers C, et al. National, regional, and worldwide estimates of stillbirth rates in 2015, with trends from 2000: a systematic analysis. *Lancet Global Health*. 2016;4(2):98–108. Available from: [https://dx.doi.org/10.1016/s2214-109x\(15\)00275-2](https://dx.doi.org/10.1016/s2214-109x(15)00275-2).

3. Collumbien M, Gerressu M, J C. Non-use and use of ineffective methods of contraception. M E, A L, R A, C M, editors; 2004.
4. Winikoff B, Mensch B. Rethinking postpartum family planning. *Stud Fam Plan*. 2015;22:294–307.
5. Glazer AB, Wolf A, Gorby N. Postpartum contraception: needs vs. reality. *Contraception*. 2011;83(3):238–241. Available from: <https://dx.doi.org/10.1016/j.contraception.2010.07.002>.
6. Ali AA, Okuda A. Factors affecting unmet need for family planning in Eastern Sudan. *BMC Pub Health*. 2013;13:102. Available from: <https://doi.org/10.1186/1471-2458-13-102>.
7. Taylor EM, Hayman R, Crawford F, Jeffery P, Smith J. The Impact of Official Development Aid on Maternal and Reproductive Health Outcomes: A Systematic Review. *PLoS ONE*. 2013;8(2):56271. Available from: <https://dx.doi.org/10.1371/journal.pone.0056271>.
8. Cleland J, Bernstein S, Ezeh A, Faundes A, Glasier A, Innis J. Family planning: the unfinished agenda. *Lancet*. 2006;368(9549):1810–1827. Available from: [https://dx.doi.org/10.1016/s0140-6736\(06\)69480-4](https://dx.doi.org/10.1016/s0140-6736(06)69480-4).
9. Darroch JE, Singh S, Nadeau J. Contraception: an investment in lives, health and development. *Issues Brief (Alan Guttmacher Inst)*. 2008;(5):1–4.
10. Kulczycki A. Husband-Wife Agreement, Power Relations and Contraceptive Use in Turkey. *Int Fam Plan Perspect*. 2008;34(03):127–137. Available from: <https://dx.doi.org/10.1363/3412708>.
11. Vural F, Vural B, Cakiroglu Y. The effect of combined antenatal and postnatal counselling on postpartum modern contraceptive use: prospective case-control study in Kocaeli. *J Clin Diagn*. 2016;10(4):4–7. Available from: <https://dx.doi.org/10.7860/JCDR/2016/16931.7641>.
12. Tran NT, Seuc A, Tshikaya B, Mutuale M, Landoulsi S, Kini B, et al. Effectiveness of post-partum family planning interventions on contraceptive use and method mix at 1 year after childbirth in Kinshasa, DR Congo (Yam Daabo): a single-blind, cluster-randomised controlled trial. *Lancet Global Health*. 2020;8:399–410. Available from: [https://dx.doi.org/10.1016/s2214-109x\(19\)30546-7](https://dx.doi.org/10.1016/s2214-109x(19)30546-7).

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