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Exposure to routine availability of immediate postpartum LARC: effect on attitudes and practices of labor and delivery and postpartum nurses☆,☆☆

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ABSTRACT

Objectives: Nurses play an integral role in intrapartum and postpartum patient education. This exploratory study aims to assess the attitudes, knowledge, and practices of labor and delivery and postpartum nurses regarding contraception and evaluate for changes in these measures 1 year after an institutional initiative allowing routine availability of immediate postpartum long-acting reversible contraception (LARC).

Study design: In 2014, Montefiore Medical Center began to routinely offer comprehensive immediate postpartum contraception. The initiative included education and feedback sessions for labor and delivery and postpartum nurses on contraception, including immediate postpartum initiation of LARC. Nurses completed anonymous surveys at the beginning of the initiative ($n=59$) and at 1 year ($n=56$). We compared baseline and 1 year survey results of contraceptive knowledge, attitudes and practices using χ^2 test, Fisher's Exact Test, or t test as appropriate.

Results: Nurses who stated they counseled patients on contraception "always" or "most of the time" increased from 27/59 (46%) to 40/56 (71%) ($p=.005$). The number of nurses who would recommend the intrauterine device and implant for postpartum contraception increased from 1/59 (2%) to 18/56 (32%) ($p<.0001$). Attitudes towards injectable contraception and breastfeeding remained negative; 27/59 nurses (46%) at baseline and 34/56 (61%) at 1 year agreed with the statement "DMPA [depot medroxyprogesterone acetate] has a negative effect on breastfeeding."

Conclusions: Experience working in a location with routine access to immediate postpartum contraception is associated with increased awareness among nurses of postpartum contraceptive options, especially LARC, and increased contraceptive counseling. Concerns about the impact of hormonal contraception on breastfeeding, specifically DMPA, are persistent and prevalent.

Implications: Labor and delivery and postpartum nurses' knowledge regarding immediate postpartum contraception, particularly LARC methods, may change with exposure to routine access to these methods. This exposure may also impact nurses' practices of providing patient counseling on what methods are appropriate for postpartum women.

1. Introduction

Access to immediate postpartum contraception, particularly long-acting reversible contraception (LARC) methods, has the potential to improve health outcomes for women and children. Traditionally, postpartum contraception has been left to the routine 6-week postpartum visit. Many women do not return for their scheduled 6-week postpartum visit due to socioeconomic and logistical barriers, and for those who do, more than half have already resumed unprotected intercourse [1–4]. Delaying the initiation of contraception until the postpartum visit puts women at risk for rapid, repeat and unintended pregnancy, which may put subsequent pregnancies at higher risk for preeclampsia, preterm birth and low birth weight [5,6]. The provision of intrauterine devices (IUDs) and contraceptive implants in the immediate postpartum period is safe and desirable for women, resulting in high rates of method utilization and continuation and a decreased risk of rapid repeat pregnancy [7,8].

The American Congress of Obstetricians and Gynecologists supports the practice of immediate postpartum LARC placement, and expert consensus supports aligning practice and reimbursement incentives to promote immediate postpartum initiation of LARC methods [3,9]. As of December 2017, 34 states in the USA, plus D.C., have adopted Medicaid policies that allow for reimbursement of LARC devices and/or insertion during the admission for delivery [10].

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Table 1
Demographic characteristics of nurses surveyed about postpartum contraception.

Characteristic	Baseline, $n=59$	1 year, $n=56$	p value
Age (years)	44.4 (10.5)	43.1 (10.4)	.52
Nursing experience (years)	18.7 (11.8)	17.2 (11.3)	.51
Hospital			
Weiler	35 (59)	33 (59)	
Wakefield	24 (41)	23 (41)	.97
Unit			
Labor & delivery	23 (39)	29 (52)	
Postpartum	36 (61)	27 (48)	.17

Data are presented as mean (± standard deviation) or n (%). The p values are from t test or χ^2 as appropriate.
Weiler Hospital and Wakefield Hospital house the two primary labor and delivery units within the MMC health system.

In July 2014, following New York State's policy change, Montefiore Medical Center (MMC) began an initiative to routinely offer comprehensive immediate postpartum contraception, including provision of LARC. The initiative began with development of an interdisciplinary committee that included physicians, nurses, pharmacy staff, lactation counselors, finance and billing staff. Implementation included educational and feedback sessions for labor and delivery and postpartum nurses on postpartum contraception, including immediate postpartum initiation of LARC. Education sessions consisted of 1-h presentations with information on our patient population including unintended pregnancy and postpartum follow-up rates, the range of contraception options available and appropriate for use in the postpartum period and methods of placement/distribution, and available data on lactation and hormonal contraception. Feedback sessions at 6 months and 1 year were open moderated discussions about postpartum contraception for nursing staff.

In this exploratory study, we evaluated changes in postpartum contraception knowledge, attitudes and practices among labor and delivery and postpartum nurses at MMC around the postpartum contraception initiative. Nurses play an integral role in intrapartum and postpartum patient education, providing education on self-care, breastfeeding, safe sleep practices, car seat safety, infant care and contraception [11–13]. Because nurses spend extensive time on education in this setting and the influence they can have on patient behavior, it is important to understand nurses' beliefs and practices in regard to immediate postpartum contraception.

2. Materials and methods

2.1. Study setting and population

MMC is a large, academic medical center in downstate New York comprised of 10 hospitals and a primary and specialty care network. All labor and delivery and postpartum nurses at two MMC hospitals in the Bronx, NY (Weiler Hospital and Wakefield Hospital) were eligible to participate and recruited. There are a total of approximately 100 labor and delivery and 80 postpartum nurses at the two hospitals. There are approximately 3800 deliveries at Weiler Hospital and 2400 deliveries at Wakefield Hospital annually. Between the two sites, approximately 50 IUDs and 50 implants are placed immediately postpartum each month.

2.2. Data collection

Labor and delivery and postpartum nurses completed anonymous, 16-question surveys (Appendix, available online) to evaluate change in knowledge, attitudes and practices around immediate postpartum contraception. We collected baseline surveys prior to the education sessions at the start of the initiative, and nurses completed the same survey for follow-up 1 year later. We attempted to recruit all labor and delivery and postpartum nurses at both hospitals for survey completion at both time points. To notify nurses and encourage participation, nursing administration sent emails to all labor and delivery and postpartum nurses at both hospitals; researchers made announcements at morning and evening shift changes and made paper surveys available on the units and through a secure online survey platform for completion. Participation was voluntary and completion of the survey implied consent. The Institutional Review Board of the Albert Einstein College of Medicine approved the protocol for this study.

2.3. Analysis

We compared baseline and 1-year results using χ^2 test, Fisher's Exact Test and t test where appropriate. To compare the demographics of respondents, we used the t test for age and years of nursing experience, and used χ^2 for work location (hospital and unit). We used χ^2 to compare the number of correctly answered contraceptive knowledge questions and to assess for differences in contraceptive attitudes and practices at baseline and 1 year. We used a t test to compare the number of contraceptive methods that nurses could spontaneously list at baseline and at 1 year. Fisher's Exact Test was used to analyze survey questions with sample sizes less than 5. All statistical tests were performed using STATA 11.2 statistical software (STATA Corporation, College Station, TX, USA).

3. Results

3.1. Sample characteristics

Out of approximately 180 labor and delivery and postpartum nurses, including traveler and part-time staff, 59 (33%) completed the baseline survey and 56 (31%) completed the 1-year follow-up survey. Participant characteristics are reported in Table 1. Both groups had similar characteristics, although there were slightly more postpartum nurses in the baseline sample compared to labor and delivery nurses.

Table 2
Contraceptive knowledge among surveyed nurses working in labor and delivery and postpartum.

Topic/question	Baseline answered correctly	1 Year answered correctly	p value
Percent patients returning for postpartum visit within health system.	17/55 (31)	20/52 (38)	.41
Minimum interpregnancy interval per WHO.	33/57 (57)	21/54 (38)	.04*
Identification of progestin-only methods.	5/56 (9)	8/50 (16)	.26
Ideal timing for initiation of combined contraceptives.	33/58 (56)	32/54 (57)	.89
Requirements for use of LAM.	2/53 (4)	10/53 (18)	.01*
Percent of women under 30 with sterilization regret.	16/56 (28)	19/55 (34)	.49
Percent of women with rapid repeat pregnancy after not receiving desired postpartum sterilization.	20/58 (34)	17/55 (31)	.68
Identification of highly effective contraceptive methods.	41/59 (69)	39/56 (69)	.98
Rationale for postpartum delay in starting combined contraceptives.	22/55 (40)	13/53 (24)	.08
Number of contraceptive methods listed spontaneously.	4.3 (2.3)	5.8 (2.7)	.001*

Data are presented as n (%) or mean (± standard deviation), with p values from t test, χ^2, or Fisher's Exact Test as appropriate.
* p value significant < .05.

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