

Patient knowledge regarding emergency contraception:

**A randomized controlled trial comparing pamphlet versus
web-based education**

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Disclosure

This speaker has no conflicts of interest to disclose relative to the contents of this presentation.

Objectives

Background

- Emergency contraception (EC) in the US
 - Two dedicated oral medications
 - Copper IUD
 - OTC availability
- EC use remains low¹
- Barriers to use
 - Patient knowledge²
 - Provider knowledge³



1. Mosher 2010
2. Fairhurst 2004
3. Ewing 1999

Background

- 80% of internet users look for health information⁴
- Limited data on web based interventions for contraceptive education
- Bedsider.org
 - Free web-based education about contraception
 - Marketed to young demographic 18-29yrs

Study Objective

- To determine if a web-based educational resource increases knowledge about emergency contraception when compared to standard ACOG pamphlet materials.

Methods

- Randomized controlled trial, non-blinded
- RSRB approval
- Subjects enrolled Sept/Oct 2012 at URMC Women's Health Practice
- Inclusion criteria: Age 18-29, Female, if pregnant, >36 weeks
- Exclusion criteria: history of tubal ligation, hysterectomy

METHOD EXPLORER /

- ★ most effective
- Y party-ready
- X STI prevention
- Q easy to hide
- ♥ do me now



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The explorer is a place to learn about all of the different methods of birth control. Click on any method for more details. Want a more apples-to-apples way to compare? [View a side-by-side comparison.](#)

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WE BELIEVE KNOWLEDGE IS **POWER**. WE BELIEVE BABIES ARE BEST WHEN YOU'RE **READY**. WE BELIEVE IN **YOU**.

Call Bedsider for free birth control info (888) 321-0383



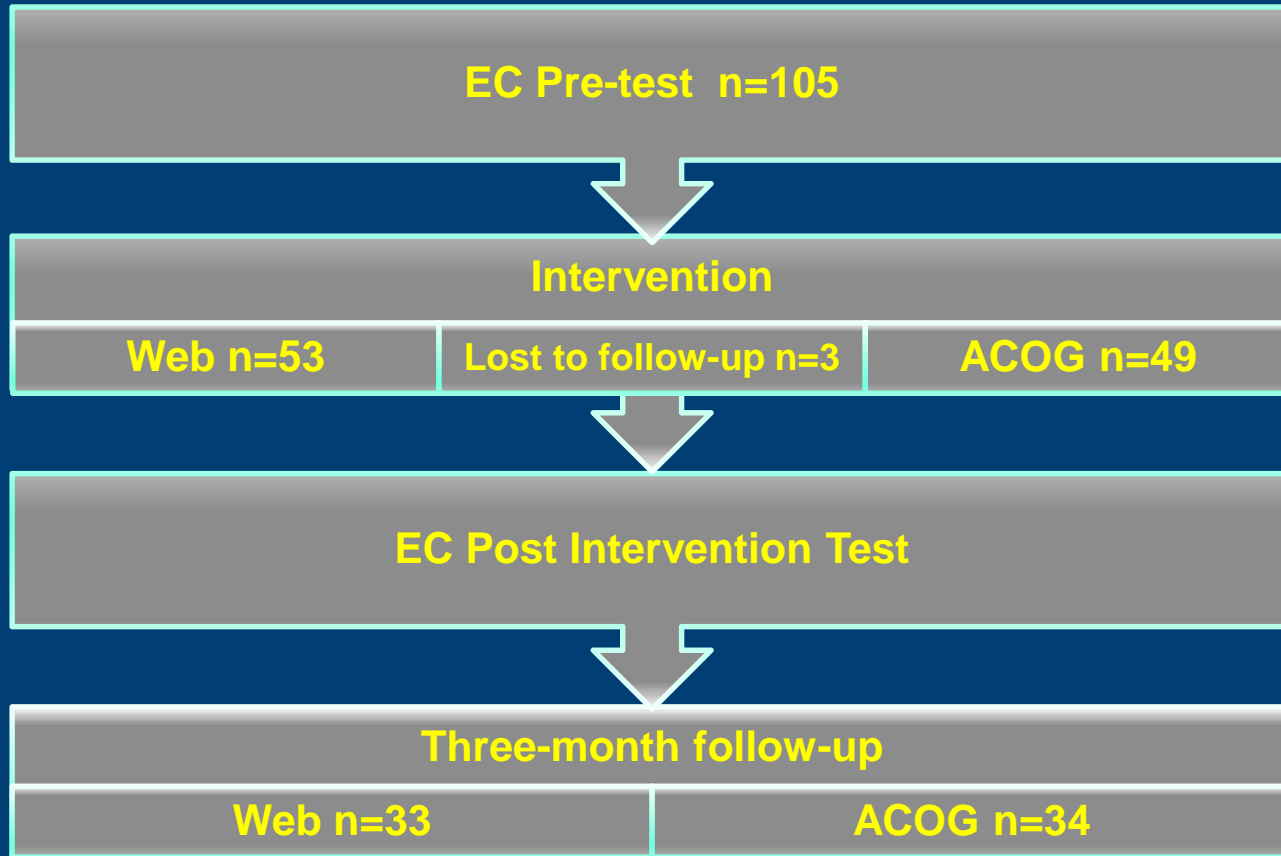
CONTRACEPTION
AP114

Emergency Contraception



PATIENT EDUCATION

Methods



Results

- No demographic differences between groups
- Both interventions increased EC knowledge
- Bedsider increased knowledge that EC is available OTC
- Both interventions taught
 - EC definitions
 - Time period for effectiveness
- After three months, knowledge was retained in the ACOG intervention

Results:

Improvement in knowledge scores

	All (n=102)	Pamphlet (n=49)	Web (n=53)	p (unpaired t)
Pre-test Score (mean(SEM))	6.64 (0.20)	6.65 (0.27)	6.62 (0.29)	0.94
Post-test Score (mean(SEM))	7.77 (0.27)	7.42 (0.42)	8.09 (0.36)	0.21
Change (SEM)	1.13	0.77	1.47	
p-change (paired t)	<0.001	0.07	<0.001	

Results:

Knowledge score change by question

	All	Pamphlet	Web
Question 1: What is EC?	0.47*	0.28*	0.64*
Question 2: Is it available over the counter?	0.23*	0.00	0.43*
Question 3: How safe is EC?	-0.01	-0.10	0.08
Question 4: How effective is EC?	-0.02	0.10	-0.13
Question 5: Does EC cause birth defects?	-0.29*	-0.06	-0.51*
Question 6: Time frame for EC effectiveness	0.76*	0.55*	0.96*

*p<0.001

Conclusions

- Educational intervention increases EC knowledge
- Knowledge was retained in pamphlet intervention over three months

Future Directions

- Larger trial needed
- Provider guided web education
- Investigate strategies to improve knowledge retention

Thank you

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 - K. Edell
 - LL Thornburg
 - N. Whaley
 - B. Folch

References

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3. Fairhurst K, Ziebland S, Wyke S, Seaman P, Glasier A. Emergency contraception: why can't you give it away? Qualitative findings from an evaluation of advance provision of emergency contraception. Contraception 2004. 70(1): 25-29.
4. Susannah Fox www.pewinternethealth.com

Demographics

	Pamphlet N=48	Web N=52	p value
Age	22.5 (18 - 29)	24 (18 - 29)	0.96
Marital status			0.79
Single	33 (67.3)	32 (60.4)	
Married	4 (8.2)	6 (11.3)	
Separated	1 (2)	3 (5.7)	
Single, living with partner	7 (14.3)	9 (17)	
Other	3 (6.1)	2 (3.8)	
Education			0.97
Did not complete high school	11 (22.9)	10 (19.2)	
Completed high school or GED	16 (33.3)	19 (36.5)	
In college	15 (31.3)	17 (32.7)	
Graduated from college	6 (12.5)	6 (11.5)	
Monthly Income			0.24
Less than \$500	13 (27.1)	13 (25)	
\$501 - \$1,000	14 (29.2)	13 (25)	
\$1,001 - \$1,500	7 (14.6)	8 (15.4)	
\$1,501 - \$2,000	9 (18.8)	7 (13.5)	
More than \$2,000	3 (6.3)	11 (21.2)	
Insurance			0.99
Government (Medicaid/Medicare)	34 (70.8)	36 (69.2)	
Place of employment	4 (8.3)	4 (7.7)	
Parents or spouses employment	6 (12.5)	7 (13.5)	
Uninsured	4 (8.3)	5 (9.6)	
Race/Ethnicity			*
Caucasian	14 (28.6)	17 (32.1)	
Hispanic	6 (12.2)	5 (9.4)	
African-American	34 (69.4)	34 (64.2)	
Internet Use Health Information			0.22
Always	15 (30.6)	18 (34)	
Very Often	13 (26.5)	18 (34)	
Sometimes	15 (30.6)	9 (17)	
Rarely or Never	3 (6.1)	8 (15.1)	

Provider Knowledge

	Non-OBGYN	OBGYN	p value
Question 1: What is EC?	n=76	n=68	
Median Score (Range)	1.25 (0 - 2)	2.0 (0 - 2)	<0.001
Question 2: Is EC available over the counter?	n=77	n=68	
N (%)	58 (75.3)	65 (95.6)	.001
Question 3: How safe is EC?	n=77	n=69	
N (%)	76 (98.7)	68 (98.6)	.94
Question 4: How effective is EC?	n=77	n=69	
N (%)	63 (81.8)	57 (82.6)	.90
Question 5: Does EC cause birth defects?	n=77	n=69	
N (%)	3 (3.9)	1 (1.4)	.37
Question 6: Time frame for EC effectiveness	n=77	n=69	
N (%)	54 (70.1)	58 (84.1)	.047
TOTAL Score	n=75	n=66	
Median (Range)	8.5 (0.5 - 11.5)	9.5 (6.0 - 10)	<.0001