

Promotion of Girls Reproductive Knowledge Through a Health Camp Intervention

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▸ BACKGROUND

- Preconception understanding and monitoring of the female reproductive system is supported by the ACOG and the AAP
- ACOG and AAP recommend that the evaluation of menstrual cycles should be included with an assessment of other vital signs, and that adolescent girls should be educated about normal menstrual cycles and the charting of the cycles

BACKGROUND

- Two of the goals of preconception care are to improve the knowledge, attitudes, and behaviors of women related to preconception health, and to reduce the disparities in adverse pregnancy outcomes.
- Women's general knowledge of the reproductive system, menstrual cycle, and its associated changes is needed for effective reproductive planning before pregnancy occurs.

BACKGROUND

- It is essential to start reproductive education early
 - To use the life course approach
 - To address health disparities among ethnic minority women
 - To promote reproductive health and positive birth outcomes



BACKGROUND

- Partnership between Calvin's nursing program and four low income ethnically diverse underserved neighborhoods
- Community-based participatory research (CBPR)
 - Need assessment using focus group and surveys
 - Identified health concerns and recommended solutions



BACKGROUND

- Topics include mental health, communication patterns, health-seeking behaviors, and reproductive health knowledge
- Request from Preconception Reproductive Knowledge (PREKNOP) participants for the Nursing Program to help educate their daughters about their bodies

➤ BACKGROUND

- Promoting the future of nursing and other health professions
- Undergraduate students within and outside of the nursing were involved



OBJECTIVE

- This study examined whether a one-week health camp integrated with reproductive health sessions can improve the girls' knowledge of ovulation, menstrual cycle and some of the negative consequences of sexually transmitted infections



METHODS

- Guided by the Robert Wood Johnson Foundation (RWJF) Culture of Health Action Framework, with a focus on the first Action, which is to make health a shared value



METHODS

- One-week health promotion day camp
- Young girls ages 9-15 years
- Low socio-economic status
- Diverse racial backgrounds
- Urban medically underserved area



METHODS

- Goals of the Camp
 - Promoting a culture of health
 - Educating girls about their bodies, leadership, and the health professions



FEATURES OF THE HEALTH CAMP

- Free
- Transportation included
- Staffed by faculty, health professionals, college-age group counselors, community liaisons



METHODS

- Simple descriptive study
 - Pre- and post-assessments
- Two camps
 - Week 1
 - 48 girls ages 9 – 12 years
 - Week 2
 - 41 girls ages 12-15 years
- N= 89 girls participated in the post-camp surveys.



Camp Content

Red A

9:00-9:30AM Welcome and Career Close up SB110	9:00-9:30AM Welcome and Career Close up SB110	9:00-9:30AM Welcome and Career Close up SB110	9:00-9:30AM Welcome and Career Close up SB110	9:00-9:30AM Welcome and Career Close up SB110
9:35-10:00AM Survey and Petri NH 180	9:35-10:00AM Exercise NH159	9:35-10:00AM Exercise NH159	9:35-10:00AM Exercise NH159	9:35-10:00AM Exercise NH159
10:05-10:25AM Group Intros Commons Lawn	10:05-11:00AM Reproductive Anatomy NH159	10:05-11:00AM Cells NH159	10:05-11:00AM Reproductive Health NH159	10:05-12:00PM Scavenger Hunt/Campus Tour
10:30-11:25AM Physical Assessment SB220	11:05-12:00PM Team Building-Conflict Resolution/bully NH078	11:05-11:30AM Dance NH165	11:05-12:00PM Team Building-Leadership NH078	Rock Wall Housing Johnny's SPAUD Library Admissions
11:30-12:25PM Cardiovascular NH159	12:05-12:40PM Lunch	11:35-12:00PM Mindfulness NH168	12:05-12:40PM Lunch	12:05-12:40PM Lunch
12:30-1:15PM Lunch	12:45-1:40PM Self-care NH078	12:45-1:40PM Babysitting NH165	12:45-1:40PM Dr.'s Office Visit Health Services	12:50-1:45PM Post-test NH180
1:20-1:40PM Team Building NH078	1:45-2:40PM Mental Health 1 NH165	1:45-2:40PM Healthy Behaviors NH168	1:45-2:05PM Nutrition 2 SB276	1:20-1:40 Recap SB110
1:45-2:40PM Nutrition 1 VN235	2:45-3:00PM Wrap up SB110	2:45-3:00PM Wrap up SB110	2:45-3:00PM Wrap up SB110	1:45-2:05PM Empowerment SB110
2:45-3:00PM Wrap up SB110				2:05-3:00PM Wrap up/Graduation SB110

DATA ANALYSIS

- Used simple uni-variate and bi-variate analyses.
 - Percentages, means, and chi-square test for bi-variate analyses.
- The test for statistical significance is made at the 5%.



RESULTS- WEEK 1

- In week 1, there was a significant increase ($p < 0.01$) in the girls' knowledge in 7 out of 8 questions on reproductive anatomy and physiology such as functions of the fallopian tubes, ovaries, uterus, ovulation, number of eggs released per month

RESULTS- WEEK 2

For 12-15 years

Ovulation usually occurs 14-16 days before the onset of the next menstrual cycle.

	Pretest		Post-test	
	Frequency	Percentage	Frequency	Percentage
Yes	12	30.0	33	78.6
No	4	10.0	5	11.9
Don't know	24	60.0	4	9.5
Total	40	100.0	42	100.0

There is a statistically significant difference between the percentage answering correctly from pretest to post-test. P-value = 0.00

RESULTS

For 12-15 years

A woman releases one egg from her ovary every month

	Pretest		Post-test	
	Frequency	Percentage	Frequency	Percentage
Yes	22	55.0	35	83.3
No	8	20.0	6	14.3
Don't know	10	25.0	1	2.4
Total	40	100.0	42	100.0

There is a statistically significant difference between the percentage answering correctly from pretest to post-test. P-value = 0.01

RESULTS

For 12-15 years

A woman's egg lives for only 1 day.

	Pretest		Post-test	
	Frequency	Percentage	Frequency	Percentage
Yes	5	12.5	11	26.2
No	16	40.0	19	45.2
Don't know	19	47.5	12	28.6
Total	40	100.0	42	100.0

There is no statistically significant difference between the percentage answering correctly from pretest to post-test. P-value = 0.12

RESULTS

For 12-15 years

Fallopian tubes are needed for having a baby.

	Pretest		Post-test	
	Frequency	Percentage	Frequency	Percentage
Yes	17	42.5	32	76.2
No	6	15.0	5	11.9
Don't know	17	42.5	5	11.9
Total	40	100.0	42	100.0

There is a statistically significant difference between the percentage answering correctly from pretest to post-test. P-value = 0.00

RESULTS

For 12-15 years

Ovulation is when a matured egg is released from the woman's ovary.

	Pretest		Post-test	
	Frequency	Percentage	Frequency	Percentage
Yes	22	56.4	35	83.3
No	1	2.6	4	9.5
Don't know	16	41.0	3	7.1
Total	39	100.0	42	100.0

There is a statistically significant difference between the percentage answering correctly from pretest to post-test. P-value = 0.01

RESULTS

For 12-15 years: A woman's menstrual cycle (from the beginning of one period to the beginning of the next one) is between 20 and 36 days.

	Pretest		Post-test	
	Frequency	Percentage	Frequency	Percentage
Yes	24	60.0	38	90.5
No	6	15.0	3	7.1
Don't know	10	25.0	1	2.4
Total	40	100.0	42	100.0

There is a statistically significant difference between the percentage answering correctly from pretest to post-test. P-value = 0.00

RESULTS –WEEK 2

- Pretest, some did not know
 - The average number of days for a regular menstrual cycle (40%),
 - What ovulation is (44%),
 - The ovulation timing (70%),
 - the number of eggs released from an ovary each month (45%).
- During posttest,
 - 71.4% (versus 37.5% pretest; $p=0.00$) knew that if a woman gets a STI that is caused by a virus, she will have that disease for the rest of her life,
 - 83.3% (versus 52.5% pretest; $p=0.00$) STI's can cause cancer in your cervix.

Conclusion:

- Adolescent girls' knowledge about their reproductive health, namely, ovulation and ovulation time, menstrual cycle and some of the negative consequences of STIs can be improved in a one-week health promotion day camps.
- Nurses and health professionals need to avail of different community settings to equip young adolescents with relevant reproductive information to promote reproductive and sexual health

▸ Acknowledgements



Questions 😊