New Male Contraception:
College Students’ Attitudes & Perceived Behaviors Related to Non-Hormonal Injectable Gel
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Introduction

Contraceptive options for male patients are extremely limited and women disproportionately bear the burdens of pregnancy prevention. Contrary to feminized gender norms associated with birth control, international studies have indicated that men are increasingly willing to assume personal contraceptive control and women would trust male partners with this responsibility. Sexually transmitted infection (STI) prevention has been another concern for nurses educating about new male contraception.

Young adulthood is often marked by increased sexual activity, so members of this demographic would be prime beneficiaries of innovative family planning.

Purpose: To explore undergraduate college students’ perceptions regarding a developing male contraceptive: non-hormonal injectable gel (NHIG).

Pharmacodynamics

- Long acting (1 ± year(s))
- Reversible (via a flush to remove the polymer)
- Ejaculate volume unchanged

NHIG Administration Route

Vas Deference = NHIG

Figure 1. Bilaterally injected into the lumen of each vas deference.

NHIG Mechanisms of Action

a) Sperm = NHIG Seminal Fluid

Figure 2. Cross sectional view of the vas deference for two versions of NHIG. a) A semipermeable gel polymer obstructs the passage of sperm (which reabsorb). b) A gel polymer degrades passing sperm, rendering them immotile or nonfunctional.

Methods

Population: Undergraduate students at a small, Midwestern, liberal arts college.

Sample Demographics: (N = 474)
- Age Range: 18-26 years old (Fall 2016)
- Sex: Female (68%), Male (32%), Intersex (0%)
- Race: White (89%), Latino(a) (5%), Asian (5%)

Data Collection:
- Online survey (Via SurveyMonkey®)
- Informed by the theory of planned behavior
- Measured 8 variables pertaining to NHIG

Analysis: (Via RStudio®) descriptive statistics, simple frequencies, chi-squared test, 2-sample proportion test

Results

Likelihood of Using Other Contraceptives with NHIG

Figure 4. Likelihood of potential users using other contraceptives simultaneously with NHIG during vaginal intercourse. Males (n = 110), females (n = 219). a) Methods such as condoms, dams, gloves. b) Methods such as pills, vaginal rings, injections, implants.

Contraceptive Attitudes

- Partners Should Be Equally Responsible for Contraception
- Males Can Be Trusted to Use Contraception

Discussion & Conclusion

Findings & Implications:
- Potential male users reported being overall less likely to use NHIG, whereas female partners reported being overall more likely to encourage NHIG use.
- More female partners would trust male partners with this responsibility.
- A majority of potential users believed partners should be equally responsible for and trusted with contraception use (but women were more trusted and more trusting).
- The difference between male desire for contraceptive control vs. female desire for males to have control was statistically significant (p = 0.017).
- Many people (43.6%, males; 16.5%, females) agreed that NHIG would increase their likelihood of using, or encouraging the use of, NHIG.
- There was a significant difference in who was more likely or extremely likely to use both protective barrier and hormonal methods with NHIG.
- A majority of potential users believed partners should be equally responsible for and trusted with contraception use (but women were more trusted and more trusting).
- The difference between male desire for contraceptive control vs. female desire for males to have control was statistically significant (p = 0.017).
- Low cost was a major encourager of NHIG use, and high cost was the top deterrent, for both male users and female partners.
- Nurses should advocate for affordable contraception.
- Most males and females indicated they would be likely or extremely likely to use both protective barrier and hormonal methods with NHIG.
- Significantly more (p = 0.000) female partners than male users desired multiple contraceptive coverage.
- Undergraduate students would likely use additional STI and pregnancy protection with NHIG use.
- Nurses should reinforce STI prevention methods.

Limitations:
- Convenience sample (lower male participation)
- New tool
- Measured hypothetical behavior

Future Research:
- Methods to measure actual behavior.
- Assess attitudes and perceived behaviors among people from other subgroups and countries.