## **Supplementary Online Content**

Hawks L, Woolhandler S, Himmelstein DU, Bor DH, Gaffney A, McCormick D. Association between forced sexual initiation and health outcomes among US women. *JAMA Intern Med.* Published online September 16, 2019. doi:10.1001/jamainternmed.2019.3500

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**eTable 5.** Association Between Forced Compared to Voluntary Sexual Initiation and Reproductive, Gynecologic and General Health Outcomes controlled for Race, Poverty Status, Nativity, Age and Exposure to Sexual Assault After Sexual Initiation

This supplementary material has been provided by the authors to give readers additional information about their work.

	Age <18 at first sexual encounter	Age≥18 at first sexual encounter	
	AOR* [95% CI]	AOR* [95% CI]	
Reproductive Health Measures			
1 <sup>st</sup> pregnancy unwanted	1.7 [1.3 – 2.2]	2.1 [1.0-4.4]	
Ever had abortion	1.0 [0.7-1.3]	4.6 [2.5-8.7]	
Never used birth control	0.4 [0.1-1.0]	0.3 [0.1-0.6]	
Gynecologic Health Measures			
PID	1.8 [1.2-2.7]	3.8 [1.5-10.1]	
Endometriosis	1.6 [1.1-2.4]	1.3 [0.5-3.8]	
Problems with ovulation or menstruation	1.8 [1.4-2.5]	1.8 [1.04-2.9]	
General Health Measures			
Illicit drug use*	3.3 [1.6-6.8]	1.9 [0.4-9.9]	
Fair or poor health	2.0 [1.4-2.8]	1.7 [0.8-3.6]	
Difficulty completing tasks outside home	2.5 [1.8-3.5]	3.5 [1.2-9.9]	

**eTable 1.** Adjusted Odds Ratios of Reproductive, Gynecologic and General Health Outcomes and Forced SI, Stratified by Minor vs. Adult at First Sexual Encounter

\*Adjusted odds ratios were controlled for age, poverty level, race, nativity

\*\*Defined as self-reported cocaine, crack, methamphetamine, or injection drug use in the past 12 months

**eTable 2.** Association between Forced Sexual Initiation and Reproductive, Gynecologic and General Health Among Women Who Experienced Forced SI and No Additional Forced Sexual Intercourse (N=684).

	Unadjusted Odds Ratio [95% CI]	AOR* [95% CI]
Reproductive Health Measures		
1 <sup>st</sup> pregnancy unwanted	1.7 [1.3-2.3]	1.8 [1.3-2.4]
Ever had abortion	1.4 [1.0-2.0]	1.4 [0.99-2.0]
Never used birth control	2.2 [1.3-3.8]	2.2 [1.2-3.8]
Gynecologic Health Measures		
PID	1.9 [1.2-3.1]	1.8 [1.1-2.8]
Endometriosis	1.5 [0.9-2.5]	1.4 [0.9-2.4]
Problems with ovulation or menstruation	1.6 [1.2-2.3]	1.7 [1.2-2.3]
General Health Measures		
Illicit drug use**	2.2 [0.9-5.3]	2.3 [1.0-5.4]
Fair or poor health	1.6 [1.1-2.4]	1.5 [1.0-2.2]
Difficulty completing tasks outside home	1.6 [1.0-2.7]	1.7 [1.0-2.8]

\*Adjusted odds ratios were adjusted for age, poverty level, race, nativity

\*\*Defined as self-reported cocaine, crack, methamphetamine, or injection drug use in the past 12 months

**eTable 3.** Association Between Forced Compared to Voluntary Sexual Initiation and Reproductive, Gynecologic and General Health Outcomes Controlling for Race, Poverty Status, Nativity, and Time Since Sexual Initiation

	AOR	
	Or	
	Adjusted Difference	
	[95% CI]	
Reproductive Health Measures		
Number of pregnancies	0.7 pregnancies [-0.1 - 0.2]	
Age at first pregnancy (years)	-1.5 years [-2.10.8]	
# Lifetime sexual partners	1.4 partners [0.1 - 2.7]	
1 <sup>st</sup> pregnancy unwanted	1.8 [1.4 - 2.3]	
Ever had abortion	1.4 [1.1 - 1.9]	
Never used birth control	2.2 [1.1 - 4.4]	
Use of fertility services	1.1 [0.7 - 1.6]	
Gynecologic Health Measures		
Pap UTD*	1.1 [0.9 - 1.4]	
Never HIV test	0.9 [0.7 - 1.3]	
UF	0.8 [0.5 - 1.1]	
PID	2.0 [1.3 - 3.0]	
Endometriosis	1.5 [1.0 - 2.1]	
Problems with ovulation or menstruation	1.8 [1.4 - 2.3]	
General Health Measures		
Diabetes	1.0 [0.8 - 1.4]	
BMI >30	1.2 [1.0 - 1.4]	
Current smoking	1.1 [0.9 - 1.3]	
Unhealthy alcohol use**	1.1 [0.8 - 1.6]	
Illicit drug use***	3.7 [1.9 - 7.3]	
Fair or poor health	1.9 [1.4 - 2.6]	
Difficulty completing tasks outside home	2.6 [1.8 - 3.6]	

\* only analyzed for women age 21 and above.

\*\* defined as consuming four or more drinks on one occasion during the past month

\*\*\* defined as self-reported cocaine, crack, methamphetamine, or injection drug use in the past 12 months

**eTable 4.** Association Between Forced vs. Voluntary Sexual Initiation and Reproductive, Gynecologic and General Health Outcomes controlled For Mother's Education Level in Addition to Respondent Race, Poverty Status, Nativity, and Age

	AOR	
	or	
	Adjusted Difference	
	[95% CI]	
Reproductive Health Measures		
Number of pregnancies	0.3 pregnancies [0.01-0.5]	
Age at first pregnancy	-1.6 years (-2.2 – -1.0)	
# Lifetime sexual partners	2.2 partners [0.9-3.5]	
1 <sup>st</sup> Pregnancy Unwanted	1.9 [1.5 - 2.4]	
Ever had abortion	1.5 [1.2 - 2.0]	
Never used birth control	2.6 [1.6 - 4.4]	
Use of fertility services	1.2 [0.8 - 1.7]	
Gynecologic Health Measures		
Pap UTD*	1.1 [0.9 - 1.4]	
Never HIV test	0.9 [0.7 - 1.2]	
UF	1.0 [0.7 - 1.4]	
PID	2.2 [1.5 - 3.4]	
Endometriosis	1.6 [1.1 - 2.3]	
Problems with ovulation or menstruation	1.8 [1.4 - 2.3]	
General Health Measures		
Diabetes	1.1 [0.8 - 1.5]	
BMI >30	1.2 [1.0 - 1.4]	
Current smoking	1.1 [0.9 - 1.4]	
Unhealthy alcohol use**	1.0 [0.7 - 1.5]	
Illicit drug use***	3.5 [1.8 - 6.9]	
Fair or poor health	2.0 [1.4 - 2.7]	
Difficulty completing tasks outside home	2.8 [2.0 - 3.8]	

\* only analyzed for women age 21 and above.

\*\* defined as consuming four or more drinks on one occasion during the past month

\*\*\*Defined as self-reported cocaine, crack, methamphetamine, or injection drug use in the past 12 months **eTable 5.** Association Between Forced Compared to Voluntary Sexual Initiation and Reproductive, Gynecologic and General Health Outcomes controlled For Race, Poverty Status, Nativity, Age and Exposure to Sexual Assault After Sexual Initiation

	AOR
	or Adjusted Difference [95% CI]
<b>Reproductive Health Measures</b>	
Number of pregnancies	0.2 pregnancies [0.1-0.4]
Age at first pregnancy	
# Lifetime sexual partners	1.4 partners [0.1 - 2.8]
1 <sup>st</sup> pregnancy unwanted	1.8 [1.4 - 2.2]
Ever had abortion	1.4 [1.1 - 1.8]
Never used birth control	2.9 [1.8 - 4.8]
Use of fertility services	1.2 [0.8 - 1.7]
Gynecologic Health Measures	
Pap UTD*	1.1 [0.9 - 1.5]
Never HIV test	1.0 [0.7 - 1.3]
UF	0.9 [0.6 - 1.3]
PID	1.9 [1.3 - 2.9]
Endometriosis	1.5 [1.0 - 2.1]
Problems with ovulation or menstruation	1.7 [1.3 - 2.2]
General Health Measures	
Diabetes	1.1 [0.8 - 1.5]
BMI >30	1.1 [0.9 - 1.4]
Current smoking	1.0 [0.8 - 1.2]
Unhealthy alcohol use**	1.0 [0.7 - 1.5]
Illicit drug use***	3.1 [1.6 - 5.9]
Fair or poor health	1.8 [1.3 - 2.5]
Difficulty completing tasks outside home	2.4 [1.7 - 3.3]

\* only analyzed for women age 21 and above.

\*\* defined as consuming four or more drinks on one occasion during the past month \*\*\*Defined as self-reported cocaine, crack, methamphetamine, or injection drug use in the past

12 months