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Sexual Violence Victimization of U.S. Males: Negative Health Conditions Associated with Rape and Being Made to Penetrate

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Abstract

Sexual violence is a significant public health problem with long-term health implications. Previous investigations of male victimization have often relied on nongeneralizable samples to examine the health consequences of rape. Furthermore, made to penetrate (MTP) victimization has received very little attention as a specific form of sexual violence. Using data from the 2010 to 2012 National Intimate Partner and Sexual Violence Survey, we examined negative impacts (e.g., injury) and health conditions associated with experiences of rape and MTP among male victims in the United States. Results indicate that approximately 1 in 4 victims of rape-only and 1 in 12 victims of MTP-only reported physical injuries. An estimated 62.7% of rape-only victims and 59.8% of MTP-only victims reported at least one impact due to the perpetrator's violence. Rape victims were significantly more likely than nonrape victims to report 2 of 11 health conditions measured, while MTP victims had greater odds of reporting 6 of 11 health conditions measured compared to non-MTP victims. This article fills gaps in understanding the impacts of rape and MTP on male victims, and it is the only study to do so using a large, nationally representative sample. Sexual violence is linked to serious health effects but is also preventable. Screening for violence victimization and preventing male sexual violence before it happens are both important to reduce the risk for immediate and chronic health impacts.

Keywords

male victims < sexual assault; anything related to sexual assault < sexual assault; PTSD; violence exposure; mental health and violence

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Introduction

Sexual violence (SV), defined broadly to include any unwanted sexual act where consent is not given or the victim is unable to consent or refuse (Basile et al., 2014), is a significant public health problem associated with long-term health implications for women and men. Few studies examine male experiences of SV victimization; existing studies use different terms to describe it, including sexual assault, unwanted sexual contact, or molestation, and often do not examine multiple types of SV by the same perpetrator. The Centers for Disease Control and Prevention (CDC) estimates that nearly one in four US men (24.8%) have experienced SV involving physical contact during their lifetimes (Smith et al. 2017). Consequences of male SV may include physical injuries (Peterson et al., 2011; Weare, 2021; Weiss, 2010), depression (Choudhary et al., 2012; Peterson et al., 2011; Wolff & Shi, 2009), anxiety (Choudhary et al., 2012; Peterson et al., 2011), confusion about sexual orientation (Peterson et al., 2011; Walker et al., 2005; Weiss, 2010), poor mental health (Choudhary et al., 2010), suicidal ideation (Peterson et al., 2011), and trauma-related symptoms (Peterson et al., 2011).

Two severe forms of SV victimization against males are rape¹ (i.e., when the victim is penetrated) and being made to penetrate (MTP).² MTP victimization against males can occur when men/boys are made to vaginally penetrate a female, penetrate a female's vagina or anus or a male's anus with their mouth, anally penetrate a male or female, or receive oral sex from a male or female. While MTP is not widely labeled or explicitly captured in the measurement in this field, CDC uses this term to clarify and better understand the SV experiences of male victims.

Results from the 2015 National Intimate Partner and Sexual Violence Survey (NISVS) estimated that 2.6% (about 2.8 million) of US men experienced completed or attempted rape during their lifetimes, and 7.1% (about 7.9 million men) were MTP someone else (attempted or completed). Smaller studies have shown evidence of male victims having been raped (Coxell et al., 2000), penetrated by an object (Coxell et al., 2000), made to receive oral sex (Coxell et al., 2000), and MTP a female (Coxell et al., 2000; Weare, 2021) or male perpetrators (Coxell et al., 2000). Similar to SV victimization of females, SV of males occurs across the lifespan. Among men who were MTP, about one in four (25.9%) was victimized before the age of 18 (Merrick et al., 2018). National Survey of Family Growth data (2002) indicate that during their lifetime, 6.1% of males aged 18–24 years were forced by a female to have vaginal intercourse, and 1.4% were forced by a male to have oral or anal sex (Smith & Ford, 2010). Other studies have shown that male SV victimization often happens at young ages (Merrick et al., 2018), but also occurs in adulthood (Coxell et al., 2000; Finkelhor et al., 2015; Merrick et al., 2018; Payne, 2010; Peterson et al., 2011; Ports et al., 2016).

¹-Defined as any completed or attempted unwanted oral or anal penetration of a male through the use of physical force, or threats to physically harm, or when the victim was drunk, high, drugged, or passed out and unable to give consent.

²-Defined as times when the victim was made to, or there was an attempt to make them, sexually penetrate someone without the victim's consent because the victim was physically forced or threatened with physical harm, or when the victim was drunk, high, drugged, or passed out and unable to consent. The term, "forced-to-penetrate," has also been used to describe this form of victimization (e.g., see Weare, 2021).

Associations with Health

The associations between SV victimization of males and physical and psychological health conditions are understudied, and existing studies that document health consequences do not consistently define the different types of SV under investigation. A comprehensive review identified 24 studies that examined psychological or emotional consequences of SV, comparing adult male and female SV victims and victimized to non-victimized men (Peterson et al., 2011). Multiple studies, including convenience, clinical, special populations, and random samples that compared victims to non-victims found that adult male victims of rape and other SV experienced higher rates of psychological disturbance than non-victimized men (Coxell et al., 1999; Elliott et al., 2004). An analysis of the SV module within the Behavioral Risk Factor Surveillance System (2005–2006, 20 and 12 US states, respectively) revealed that compared to non-victimized males, those who experienced attempted and completed forced intercourse were more likely to report poor mental health, poor life satisfaction, activity limitations, and low emotional or social support (Choudhary et al., 2010).

Some studies have examined the association between SV victimization of men and physical health. A review of the effects of SV of men concluded that sexual assault of men is likely to be violent and accompany greater physical injuries than sexual assault of women, but that sexually victimized men are unlikely to seek medical care unless their injuries are significant (Tewksbury, 2007). Notably, much of the research examining physical health consequences of SV was in treatment-seeking and non-US populations (Peterson et al., 2011). In a descriptive analysis of 40 male rape victims, physical injuries were reported by a majority of victims (Walker et al., 2005). Results from a UK online survey of 154 male victims of MTP found that among those with physical injuries, most injuries were to their genitalia and upper bodies (Weare, 2021). Finally, in a sample of male SV victims (mostly involving penetration) presenting to a French medical clinic, 5.6% sustained genital trauma (Grossin et al., 2003) while 18% of male SV victims in Manchester, UK reported rectal trauma (McLean et al., 2004).

Previous research has also examined the relationship between SV victimization of men and risk behaviors and chronic conditions. A large study of men across 18 US states found that men who experienced non-consensual sex were at a higher risk for reporting high cholesterol, HIV risk factors, current smoking, and excessive alcohol use than non-victimized males (Smith & Breiding, 2011). Men who experienced non-consensual sex were also more likely to report joint disease, current asthma, and activity limitations than male non-victims (Smith & Breiding, 2011). Although more research is needed (Sena et al., 2015), studies have found an association between male SV victimization and poorer overall health status (Choudhary et al., 2010; Watson-Johnson et al., 2012) and sexually transmitted disease (STD) diagnosis (deVisser et al., 2003). In a UK clinical study of 224 men, 10% of victims who were sexually victimized by men and 13% by women reported being infected with a STD following the victimization (Coxell et al., 2000).

The Current Study

This paper examined negative health impacts and conditions associated with experiences of rape and MTP of male victims in the US. The study objective was to examine physical injury and sexually transmitted infections (STIs) of rape and MTP victimization, health impacts resulting from any form of violence by a rape or MTP perpetrator, and physical and mental health conditions associated with lifetime rape and MTP victimization. To clarify the impacts linked to specific subtypes of SV, we examined differences between rape-only victimization, MTP-only victimization, and both rape and MTP victimization by the same perpetrator.

Methods

Data are based on the 2010–2012 administration of the NISVS. Noninstitutionalized English- and Spanish-speaking adults in the 50 US states and the District of Columbia were interviewed through a random-digit-dial telephone survey including both landline and cellular telephone frames. The Institutional Review Board of RTI International approved the survey protocol. A total of 41,174 respondents completed the survey (22,590 women and 18,584 men); 56.7% were conducted by cellular phone and 43.3% by landline. The overall weighted response rates across the 2010–2012 data years ranged from 27.5% to 33.6%, and the weighted cooperation rates ranged from 80.3% to 83.5% (American Association for Public Opinion Research (AAPOR), 2016). The analytic sample consisted of 18,584 males representative of the US male adult population during the data collection period. Readers can refer to Smith et al. (2017) for information on a comparison of common demographic characteristics between the study sample and the study population.

Measures

Demographics.—Survey respondents were asked to provide their current age. The age variable was categorized into five categories: 18–24, 25–34, 35–44, 45–54, and 55+. *Race/Ethnicity* was captured with the following categories: Hispanic; non-Hispanic White; non-Hispanic Black or African American; non-Hispanic Asian, Native Hawaiian, or Pacific Islander; and non-Hispanic American Indian or Alaskan Native. Education was measured as the highest level of education the respondent reported having completed and included less than high school, high school graduate, post-high school but without a 4-year college degree, and 4-year college degree or higher.

Sexual Violence.—The forms of SV examined in this analysis are lifetime experiences of MTP and rape. MTP victimization was measured with 10 behaviorally specific items assessing one's experience of being made to sexually penetrate someone else (completed or attempted oral, anal, or vaginal) through use of physical force or alcohol/drug-facilitation. Examples of MTP are being made to vaginally penetrate a female using one's own penis and being made to receive oral sex from a male or female perpetrator. Rape victimization was measured using 13 behaviorally specific questions that assessed one's experience of physically forced or alcohol/drug-facilitated completed or attempted oral or anal penetration by a perpetrator. This study examined victimization by rape-only, MTP-only, and both rape and MTP. Using NISVS definitions, victims were categorized as having been raped and/or

MTP based on the content of the question (penetration of someone else (i.e., MTP) vs. being penetrated (i.e., rape)), the sex of the perpetrator, and the sex of the victim. The SV survey questions can be found in Smith et al. (2017).

When assessing impacts, victims were grouped into three categories: (1) rape-only if they had at least one rape-only perpetrator, (2) MTP-only if they had at least one MTP-only perpetrator, and (3) both rape and MTP if they had at least one perpetrator who committed both rape and MTP. When assessing associations with health conditions, experiences of rape-only, MTP-only, or both were categorized separately from each other in a dichotomous manner (yes or no). Other forms of SV were measured in NISVS that the rape-only or MTP-only victims could have experienced (e.g., unwanted sexual contact and sexual coercion), but are not described in this analysis.

Impacts resulting from MTP or rape.—This study examined impacts linked to the MTP or rape victimization by a specific perpetrator who was coded using letter initials chosen by the respondent. More detail about the linking of victims and perpetrators can be found in Black et al. (2011). Impacts included (1) physical injury: “Were you ever physically injured when [initials] did [this/any of these things]? For example, did you have bruises, anal tears, or other internal or external injuries?” (2) sexually transmitted infection: “Did you ever get an STD or other infection when [initials] did [this/any of these things]? For example, did you get Chlamydia, Gonorrhea, HIV, or some other STD?”

General impact.—Respondents who experienced any form of violence measured in the survey (including MTP and rape) answered questions designed to assess impact of any violence experienced *by a specific perpetrator*, including: being fearful, concerned for safety, having any of four symptoms of post-traumatic stress disorder (PTSD; adapted from the Primary Care PTSD Screen for DSM-IV (PC-PTSD) (Prins et al., 2003), sustaining any injuries (these may or may not be the same as those resulting from MTP or rape), service needs (medical care, housing, victim advocate, and legal services), contacted a crisis hotline, and missed at least 1 day of work/school. Need for housing, legal, or victim’s advocate services were combined to measure an overall need for support services. This study examined impacts as a result of any violence by a perpetrator of MTP or rape.

Aggregate impact.—Impact questions were assessed in relation to a specific perpetrator, without regard to the time period in which the impact occurred and asked in relation to any form of violence: SV, stalking, physical violence, psychological aggression (including expressive aggression and coercive control and entrapment), and control of reproductive/sexual health experienced by that perpetrator.

General health conditions.—General health conditions were assessed among all respondents (regardless of victimization status), including: ever told by a medical professional that the respondent had asthma, irritable bowel syndrome, diabetes, or high blood pressure; ever had frequent headaches, chronic pain, difficulty sleeping; any activity limitations because of physical, mental, or emotional problems; and any health problems that required the use of special equipment (e.g., cane and wheelchair). Respondents were asked to evaluate their current general physical (“Would you say that in general your physical

health is ...”) and mental health (“Would you say that in general your mental health is ...”), where an answer of Excellent, Very Good, Good, and Fair were coded as “Good,” whereas a response of Poor was coded as “Poor.” Detailed information about the NISVS measures is described elsewhere (Black et al., 2011; Smith et al., 2017).

Data Analysis

To account for the complex sampling design (e.g., dual-sampling design, stratification, and unequal selection probability), data analyses were weighted and analyzed using SUDAAN (version 11.01). An estimated proportion was the weighted percentage of victims who reported experiencing the specific outcome at least once in their lifetimes. An estimate is not reported when a relative standard error >30% or the numerator case count = 0.

The association between MTP or rape victimization and all general physical or mental health conditions was evaluated using the adjusted Wald *F* test through fitting logistic regression models, with a *p*-value of less than alpha of 0.05. The strength of each association was measured using an adjusted odds ratio (AOR) along with the 95% confidence intervals (CIs), controlling for demographic characteristics (age, race/ethnicity, and educational attainment status) and other types of lifetime violence victimization measured in the survey (i.e., intimate partner psychological aggression, control of reproductive health, and physical violence, stalking by any perpetrator, and SV other than MTP or rape by any perpetrator (i.e., we controlled for SV other than MTP when assessing the association between MTP and health, and we controlled for SV other than rape when assessing the association between rape and health)). Control of reproductive health was measured by the following two items: “How many of your romantic or sexual partner have ever...” (1) “tried to get pregnant when you did not want them to get pregnant or tried to stop you from using birth control?” or (2) “refused to use a condom when you wanted them to use one?” The victimization variables were created as Yes/No variables. Males with no reported MTP or rape victimization history were used as the reference group as applicable.

Results

Among US male adults, 0.9% (sample size 175) reported ever experiencing rape-only, 5.5% (sample size 893) reported MTP-only victimization, and 0.7% (sample size 138) reported experiencing both rape and MTP by the same perpetrator. The estimated number of victims was 998,000, 6,231,000, and 803,000, respectively (rounded to the nearest thousand).

Direct Impacts of Rape-Only or MTP-Only Victimization

Nearly one in four (23.1%) male rape-only victims reported physical injury (e.g., bruises, anal tears) directly related to the rape victimization. Among male MTP-only victims, approximately 1 in 12 (8.3%) reported physical injuries and 1 in 22 (4.6%) contracted a STI because of the MTP victimization. For male victims who experienced both rape and MTP by the same perpetrator, 33.2% suffered physical injuries directly related to either form of SV by the perpetrator (Table 1). Experience of physical injury was significantly lower among MTP-only victims compared to victims of rape-only or both rape and MTP.

General Impacts of Violent Victimization by the Perpetrator of Rape, MTP, or Both Forms

Next, we examined the proportion of victims of rape-only, MTP-only, or both who reported specific impacts (Table 2). These reflect the impacts due to any violence by the rape or MTP perpetrator. Some estimates are not reportable due to relative standard error >30% or cell size ≥ 20 .

General Impacts of Any Violence Perpetrated by a Rape-Only Perpetrator.—

Among victims who reported rape-only by a perpetrator, 6 in 10 or 62.7% of victims (625,000) experienced at least one general impact by the rape perpetrator (Table 2). In addition, over half (54.5%) of the victims reported experiencing fear, 4 in 10 (42.4%) reported concern for safety, and half (50.1%) experienced PTSD symptoms.

General Impacts of Any Violence Perpetrated by an MTP-Only Perpetrator.—

Among male victims who experienced MTP-only by a perpetrator, approximately 3 in 10 (29.6%, or over 1.8 million) reported experiencing at least one general impact resulting from any violence by that perpetrator. Victims reported fear (18.1%), concern for safety (16.3%), PTSD symptoms (19.0%), physical injury (6.9%), need for medical care (5.8%), and support services (8.2%). About 1 in 10 victims (10.2%) also missed at least 1 day of work or school (Table 2).

General Impacts of Any Violence Perpetrated by a Rape and MTP Perpetrator.—

—Among male victims who experienced both rape and MTP by the same perpetrator in their lifetimes, approximately 6 in 10 (59.8%, or approximately 480,000 victims) reported experiencing at least one general impact (Table 2) from any violence by that perpetrator. Over 4 in 10 victims experienced fear, concern for safety, and any PTSD symptoms (44.9%, 42.4%, and 45.9%, respectively) as a result of any violence by the rape and MTP perpetrator. Additionally, more than a quarter (27.4%) of victims reported physical injury.

Associations Between Rape Victimization and Health Conditions

Relative to males without reported lifetime rape victimization, male rape victims had significantly higher odds of reporting 2 of the 11 measured health conditions (Table 3). After controlling for demographic characteristics and other violence victimization, males with rape victimization had 1.8 times the odds of experiencing activity limitations during their lifetime compared with males without reported rape victimization (AOR = 1.8, 95% CI 1.2–2.6). Furthermore, male rape victims had two times the odds of reporting the need for special equipment compared with males without reported rape victimization (AOR = 2.0, 95% CI 1.2–3.2); see Table 3.

Associations Between MTP Victimization and Health Conditions

Compared to males without reported lifetime experiences of MTP, MTP victims had significantly higher odds of experiencing 6 of the 11 measured health conditions during their lifetime (Table 3). These health conditions were: frequent headaches (AOR = 1.5, 95% CI 1.1–1.9), chronic pain (AOR = 1.4, 95% CI 1.1–1.7), difficulty sleeping (AOR = 1.5, 95% CI 1.2–1.9), activity limitations (AOR = 1.5, 95% CI 1.2–1.9), poor mental health

(AOR = 2.3, 95% CI 1.4–3.6), and needing to use special equipment (AOR = 1.8, 95% CI 1.3–2.5).

Discussion

SV is a public health problem linked to deleterious outcomes for victims (Choudhary et al., 2012; Peterson et al., 2011; Smith & Breiding, 2011; Tewksbury, 2007; Weare, 2021). The current study used a large representative sample of U.S. adult men to examine the health impacts of rape and MTP victimization. Our results support previous evidence that these forms of SV are associated with immediate impacts, general impacts from violence by the specific perpetrator, as well as lifetime adverse health conditions, but patterns differed for rape and MTP victims.

Previous literature used mostly nongeneralizable samples to examine the health consequences of male rape victimization. Experiences of MTP, which is predominantly a male SV experience, have received little attention as a specific form of victimization. Rather, MTP has typically been excluded or combined with other experiences in rape questions. We examined MTP separately from rape to better understand how MTP victimization impacts male victims' health. One in three victims of rape and MTP by the same perpetrator reported physical injury as a result of the victimization, suggesting that these victims are particularly at risk for injuries. Interestingly, 4.6% of victims of MTP-only reported an STI as an immediate impact of the victimization, whereas STI among victims of rape-only and both rape and MTP was insufficient to produce stable estimates. This finding suggests the unique aspects of experiencing MTP and MTP-only victims' vulnerability to STIs. More research is warranted to explain this finding. Overall, findings suggest the importance of examining and measuring rape and MTP separately to provide a more nuanced understanding of male SV.

To inform prevention strategies, it would be useful to examine contextual differences of rape and MTP of male victims, such as the sex of and relationship to the perpetrator, age at first victimization, alcohol or drugs involvement, and co-occurrence of other victimization. Further, our results indicate that MTP is associated with more lifetime health conditions than rape victimization; however, this might be a function of the sample size of MTP victims compared to rape victims. Additional research with larger samples is needed to increase knowledge about these types of male victimization and understand their impacts and health implications.

The results suggest the need for greater attention to male SV and its harmful health effects and the importance of prevention and support for male victims. Future studies of male SV should include a wider breadth of health consequences. We could not report findings by race/ethnicity due to low statistical power. However, we recognize that racial/ethnic health disparities in violence are of concern and the importance of considering the historical, social, economic, and structural reasons for such disparities. Limited national data have been published showing the prevalence of male sexual victimization by race/ethnicity (Light & Monk-Turner, 2009; Smith et al., 2017). Future research on this topic should explore the role of race/ethnicity in the SV experience among men, and if possible, by specific SV experiences (e.g., rape and MTP) and individual racial/ethnic groups.

Previous work indicates that most male victims do not report their SV victimization to police (Light & Monk-Turner, 2009; Tewksbury, 2007; Walker et al., 2005; Weiss, 2010). Research also suggests that males are less likely than females to disclose their SV victimization to anyone (O’Leary & Barber, 2008), and many are unlikely to seek medical or mental health services (Tewksbury, 2007). Many SV victims, female and male, delay disclosure for many years (Easton, 2012; O’Leary & Barber, 2008; Walker et al., 2005). In addition to feelings of shame and embarrassment, concerns about confidentiality, fear of retaliation or not being believed (Sable et al., 2006), nondisclosure of male rape and MTP victimization might be due in part to social definitions of gender and uncertainty of the definition of rape (Weiss, 2010). For 85 years, the Federal Bureau of Investigation’s Uniform Crime Reports (UCR) definition of rape included only forcible male penile penetration of a female’s vagina (U.S. Department of Justice, 2012). In 2012, the UCR definition was expanded to include “the penetration, no matter how slight, of the vagina or anus with any body part or object, or oral penetration by a sex organ of another person, without the consent of the victim” (U.S. Department of Justice, 2012); this revision may help capture the experiences of male victims and bring more attention to SV against males (Depraetere et al., 2020; Fisher, 2009; Koss et al., 2007; Wilson & Miller, 2016). Challenges around disclosing victimization could lead to underestimates of the size of the male SV problem in official and survey sources (Depraetere et al., 2020) and could delay or prevent care and treatment. Using behaviorally specific questions to measure both rape and MTP to ensure detailed measurement of SV victimization and avoid subjective judgments about terms like “rape” (Wilson & Miller, 2016) can improve consistency in measurement and understanding of this problem.

This study has some limitations. First, the sample did not include institutionalized or incarcerated men, or men experiencing homelessness. Research with these populations is warranted to extend these findings, as the SV experiences of incarcerated victims, for example, may differ from non-incarcerated victims (Peterson et al., 2011). Second, directionality between victimization and health conditions cannot be determined due to the cross-sectional nature of the data. Third, the victimization findings should be viewed as underestimates. Although NISVS uses strategies to build rapport and facilitate disclosure, some men might not have felt comfortable reporting their victimization. Relatedly, if these data were collected in later years, increased disclosure might have occurred as a result of recent events in the national media, such as the #MeToo movement (Garcia, 2017). Fourth, because the follow-up questions were asked within the context of the experience with individual perpetrators who might have committed multiple forms of violence against the victims, it is not possible to link individual violence experiences to specific impacts.

This study highlights the lesser-known consequences and health problems associated with male rape and MTP victimization using a nationally representative sample. These findings advance the awareness of male SV, highlight similarities and differences in impacts from rape and MTP, and calls for efforts to address the needs of victims. Additionally, comprehensive strategies for SV prevention (Basile et al., 2016) are critical to protect males from experiencing SV in the first place and to reduce the risk for immediate and chronic health impacts.

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Table 1. Lifetime Reports of Physical Injury and Contracting a Sexually Transmitted Infection After Rape and Being MTP Among Male Victims, NISVS 2010–2012 Average Annual Estimates.

	Type of Sexual Violence Experienced by Victims								
	Rape-Only (No MTP by the Perpetrator)		MTP-Only (No Rape by the Perpetrator)		Both Rape and MTP by the Same Perpetrator				
	Weighted %	95% CI	Estimated Number of Victims ^a	Weighted %	95% CI	Estimated Number of Victims ^a	Weighted %	95% CI	Estimated Number of Victims ^a
Physical injury ^{b,c}	23.1	(14.4, 34.9)	231,000	8.3	(6.0, 11.4)	518,000	33.2	(23.2, 45.0)	267,000
Contracted a sexually transmitted infection ^{b,c}	–	–	–	4.6	(3.1, 6.9)	289,000	–	–	–

Note. NISVS = National Intimate Partner and Sexual Violence Survey; CI = confidence interval; % = percent; MTP = made to penetrate. –Estimate is not reported; relative standard error >30% or cell size 20.

^aRounded to the nearest thousand.

^bFor those who reported experiences of rape and/or being MTP someone, follow-up questions were asked about physical injury and having contracted an STI due to their experiences with a specific perpetrator.

^cIt is not possible to determine whether the injury or contraction of a STI was due to the experience of rape and/or being MTP because the direct impact questions were asked in relation to the specific perpetrator rather than the specific type of SV victimization.

Impacts^a Resulting from Any Form of Violence by a Rape or MTP Perpetrator Among Male Victims, NISVS 2010–2012 Average Annual Estimates.

Table 2.

	Type of Sexual Violence Experienced by Victims								
	Rape-Only by a Perpetrator Reported			MTP-Only by a Perpetrator Reported			Both Rape and MTP by the Same Perpetrator Reported		
	Weighted %	95% CI	Estimated Number of Victims ^b	Weighted %	95% CI	Estimated Number of Victims ^b	Weighted %	95% CI	Estimated Number of Victims ^b
Any reported impact ^{a,c}	62.7	(52.3, 72.0)	625,000	29.6	(25.3, 34.3)	1,845,000	59.8	(48.0, 70.6)	480,000
Fear	54.5	(43.9, 64.8)	544,000	18.1	(14.8, 22.1)	1,129,000	44.9	(33.7, 56.5)	360,000
Concern for safety	42.4	(32.2, 53.3)	423,000	16.3	(13.2, 19.9)	1,014,000	42.4	(31.4, 54.2)	340,000
Any PTSD symptoms ^d	50.1	(39.4, 60.8)	500,000	19.0	(15.3, 23.4)	1,182,000	45.9	(34.6, 57.6)	368,000
Injury	–	–	–	6.9	(5.1, 9.4)	431,000	27.4	(18.1, 39.4)	220,000
Needed medical care	–	–	–	5.8	(3.9, 8.4)	361,000	–	–	–
Needed services	–	–	–	8.2	(5.9, 11.5)	514,000	–	–	–
Contacted a crisis hotline	–	–	–	–	–	–	–	–	–
Missed at least 1 day of work/school	–	–	–	10.2	(7.7, 13.3)	634,000	–	–	–

Note. NISVS = National Intimate Partner and Sexual Violence Survey; CI = confidence interval; PTSD = post-traumatic stress disorder; % = percent; MTP = made to penetrate. – Estimate is not reported; relative standard error >30% or cell size 20.

^a Includes experiencing any of the following: being fearful, concerned for safety, any post-traumatic stress disorder symptoms, injury, need for medical care, need for housing services, need for victim advocate services, need for legal services, contacting a crisis hotline, and having missed at least 1 day of work or school.

^b Rounded to the nearest thousand.

^c Impact questions were assessed in relation to a specific perpetrator, without regard to the time period in which the impact occurred, and asked in relation to any form of violence: sexual violence, stalking, physical violence, psychological aggression (including expressive aggression and coercive control and entrapment), and control of reproductive/sexual health experienced by that perpetrator.

^d Includes nightmares, tried not to think about or avoided reminders of; felt constantly on guard, watchful, or easily startled; and felt numb or detached.

Table 3.

Association of Rape or MTP with Physical or Mental Health Conditions—US Men, NISVS 2010–2012.

Health Conditions	Rape Victimization ^a		MTP Victimization ^b	
	AOR ^c	95% CI of AOR	AOR	95% CI of AOR
Asthma	1.4	(0.9, 2.2)	1.1	(0.9, 1.5)
Irritable bowel syndrome	1.6	(0.8, 3.2)	1.1	(0.7, 1.8)
Diabetes	1.5	(0.8, 2.7)	1.3	(0.9, 1.9)
High blood pressure	1.4	(0.9, 2.1)	1.3	(1.0, 1.7)
Frequent headaches	1.5	(1.0, 2.4)	1.5 ^d	(1.1, 1.9)
Chronic pain	1.1	(0.7, 1.6)	1.4 ^d	(1.1, 1.7)
Difficulty sleeping	1.3	(0.9, 1.9)	1.5 ^d	(1.2, 1.9)
Activity limitations	1.8 ^e	(1.2, 2.6)	1.5 ^d	(1.2, 1.9)
Poor physical health	1.4	(0.7, 3.0)	1.5	(1.0, 2.3)
Poor mental health	1.7	(0.7, 4.1)	2.3 ^d	(1.4, 3.6)
Uses special equipment (wheelchair, special bed, cane, etc.)	2.0 ^e	(1.2, 3.2)	1.8 ^d	(1.3, 2.5)

Note. NISVS = National Intimate Partner and Sexual Violence Survey; CI = confidence interval; AOR = adjusted odds ratio; MTP = made to penetrate.

^aAdjusted for age, race/ethnicity, education, ever experiencing intimate partner psychological aggression (expressive aggression and coercive control and entrapment), intimate partner control of reproductive/sexual health, intimate partner physical violence, stalking, and sexual violence other than rape. Adult males with no rape victimization history were the reference group.

^bAdjusted for age, race/ethnicity, education, ever experiencing intimate partner psychological aggression (expressive aggression and coercive control and entrapment), intimate partner control of reproductive/sexual health, intimate partner physical violence, stalking, and sexual violence other than MTP. Adult males with no MTP victimization history were the reference group.

^cAdjusted Wald *F* test. Considered statistically significant when the 95% CI does not contain 1.

^dAdult males who reported a history of MTP victimization were significantly more likely to report the health condition; controlling for age, race/ethnicity, education, and all other forms of violence.

^eAdult males who reported a history of rape victimization were significantly more likely to report the health condition; controlling for age, race/ethnicity, education, and all other forms of violence.