Association Between Adult Sexual Assault and Psychiatric Disorders:

Results From the National Epidemiologic Survey on Alcohol and Related Conditions-III

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Abstract

Background: Sexual assault is a significant public health issue with high prevalence rates, particularly among women. Previous research suggests strong associations between sexual assault and psychiatric disorders, but studies focusing on adult sexual assault (ASA) and its sex-specific consequences are limited.

Objective: To estimate the prevalence of ASA in the US and assess its associations with psychiatric disorders and quality of life, focusing on sex differences.

Methods: We analyzed cross-sectional data from the National Epidemiologic Study of Alcohol and Related Conditions-III (NESARC-III), a nationally representative survey of US adults (N = 36,309). The study included assessments of self-reported ASA and lifetime psychiatric disorders (Alcohol Use Disorder and Associated Disabilities Interview Schedule 5) and quality of life (Short-Form 12-Item Survey version 2).

Results: The prevalence of self-reported ASA was 2.6% (n = 922), with higher rates in women (4.26%) compared to men (0.53%). ASA was associated with all lifetime psychiatric disorders and a poorer quality of life. Among participants who experienced ASA, 85.25% had at least one lifetime psychiatric disorder. Specifically, among women, 86.09% of victims had at least one lifetime psychiatric disorder (vs 54.43% in women control). The strongest associations were found with posttraumatic stress disorder (PTSD) (adjusted odds ratio [aOR] = 5.96), borderline personality disorder (aOR = 4.06), and suicide attempts (aOR = 4.67). Among men, 78.27% of victims had at least one lifetime psychiatric disorder (vs 58.09% in men control). The strongest associations were with psychotic disorders (aOR = 6.65), PTSD (aOR = 6.62), and suicide attempts (aOR = 5.01).

Conclusions: ASA was associated with many psychiatric disorders and reduced quality of life, with significant sex differences. These findings highlight the need for targeted interventions and support for sexual assault survivors, emphasizing the importance of routine screening and sex-specific prevention strategies.

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Sexual assault remains a significant public health issue with high prevalence rates, particularly among women. It is estimated that nearly 1 in 4 women (26.8%) and 1 in 26 men (3.8%) in the United States have experienced rape or attempted rape in their lifetime.[1] Available statistics are likely to underrepresent the true incidence, as only 10% to 21% of sexual assaults are reported to the police.[1,2] Significant costs are associated with sexual assault. A US study found lifetime cost of rape was $122,461 per victim and $3.1 trillion at a population level; among these costs; $1 trillion was linked to medical costs.[3] Indeed, sexual assault is associated with several psychiatric and nonpsychiatric conditions.[4]

Several sociodemographic factors have been associated with an increased risk of sexual assault, such as young age, poverty, precarious living or working conditions, and homelessness. Poverty, in particular, limits access to education and resources, which hinders the ability to prevent or report assaults and increases exposure to high-risk environments such as unstable housing and workplaces.[5–7] Additionally, research also shows that being a victim of sexual assault increases the risk of revictimization; individuals who have experienced a first assault have between a 50 and 66% chance of being victimized again.[8,9]

Alcohol use disorders are associated with sexual assault.[10] The direction of the association is discussed:

Clinical Points

- Research on sexual assault has largely focused on childhood and adolescence, leaving assaults in adulthood underexplored.
- Adult sexual assaults are associated with a variety of psychiatric disorders, with sex-specific patterns observed in men and women.
- Clinicians are encouraged to systematically screen for sexual assault history to better identify, understand, and treat associated psychiatric conditions.

the use of alcohol seems to increase the risk of sexual assault, but the consumption can also be secondary to trauma.[11]

In addition, having a psychiatric disorder increases the risk of being a victim of sexual assault, a 2016 meta-analysis found that the risk of victimization was 6 times higher for individuals with a psychiatric disorder compared with the general population.[12] This association seems to be also bidirectional, the most recent meta-analysis on this topic has found that among people who have been sexually assaulted, depressive disorders and posttraumatic syndrome disorder (PTSD) appear to be particularly common. About a third of people exposed to sexual assault had lifetime (36%) or past-year (26%) PTSD, more than a third had lifetime depressive disorders (39%), and almost a quarter had past-year depressive disorders (24%).[4] Furthermore, survivors of sexual assault suffer from severe physical symptoms, which adversely affect their daily activities and overall quality of life.[13]

However, despite the significant prevalence of adult sexual assault (ASA), the literature on this topic has limitations. Most studies focus on the college population or women, with very few examining sexual assaults occurring in adulthood and even fewer exploring a broad spectrum of psychiatric disorders or focusing on male victims.[14,15] This gap is problematic, as it is a problem for the general population[14] and also because the pattern of psychiatric disorders associated with sexual victimization might differ between sexes.[16] To our knowledge, there is only 1 recent study that distinguishes between men and women, conducted in the general population in Norway,[17] comparing the two sexes as well as the mental health and quality of life of sexual assault victims with those of nonvictims, and it found the same profiles for both sexes with a risk increased by 3.7 for PTSD, 7.5 for attempted suicide, and 5.6 for eating disorders compared to controls. However, in this study, the number of men who reported sexual assault is minimal (n = 16), psychiatric diagnoses are not based on *DSM-5*, and not all psychiatric disorders are investigated.

Unlike most previous research, we employed a nationally representative sample and *DSM-5* criteria to obtain robust estimates of the prevalence of ASA and to assess a wide range of psychiatric disorders. By distinguishing between men and women, we aim to clarify how ASA may affect each sex differently and thus guide more targeted clinical approaches. Including a larger sample of male participants also offers a more comprehensive and updated perspective on this issue.

We, therefore, conducted this study in the general American population to provide more precise estimates of the prevalence of sexual assault among adults and to assess its impact on psychiatric disorders and quality of life in both men and women. Our findings could inform public health policies focused on targeted prevention and intervention strategies to address these critical issues effectively.

METHODS

Study Design and Sample

We analyzed cross-sectional data from a population-based nationally representative sample, the National Epidemiologic Study of Alcohol and Related Conditions-III (NESARC-III), which is a survey of the US civilian population 18 years (N = 36,309) and older residing in households and group quarters.[18]

To be included, participants had to meet the following criteria: at least 18 years of age and not currently in Armed Forces, Military Reserves, or National Guard.

Data collection was achieved by interviewers between April 2012 and June 2013, and they were trained, supervised, and randomly called back to verify data.

During the face-to-face interviews, each participant was asked about demographic characteristics and medical conditions and received a $90 incentive for their participation in the study. The overall response rate was 60.1%. Three main stages were necessary to carry out the weighting procedure: (1) to calculate the weights that represent the probability of being included in the study after adjusting for nonresponse, (2) to compensate for the nonresponse to the Alcohol Use Disorder and Associated Disabilities Interview Schedule-5 (AUDADIS-5) interview, and (3) poststratification of the nonresponse-adjusted weights to known population counts derived from the 2012 American Community Survey (ACS).

The NESARC-III utilized a sampling method involving multiple stages, with a deliberate oversampling of Hispanic, black, and Asian individuals.[19] The US Census Bureau and the US Office of Management and Budget conducted an ethical review of the research protocol and the informed consent procedures and provided their approval. The current study obtained approval from the Institutional Review Board of the French Institute of Medical Research and Health (IRB00003888).

Measures

Self-reported sexual assault. Participants were provided with a card detailing various traumatic experiences and were asked to indicate which stressful events they had encountered, along with the age at which these events occurred (childhood or adulthood). Participants who reported having been sexually assaulted as an adult were considered as "sexually assault."

Sociodemographic measures. Sociodemographic measures were grouped into the following categories: race/ethnicity included (1) white, (2) black, (3) Asian/Native Hawaiian/Pacific Islander, (4) Hispanic/Latino, and (5) American Indian/Alaska Native. Nativity was divided into (1) US-born and (2) foreign-born. Age at the time of the interview was categorized as (1) 18–29, (2) 30–44, (3) 45–64, and (4) ≥65 years old. Educational level was classified as (1) less than high school, (2) high school graduate, and (3) some college or higher. Individual income was categorized as (1) $0–19,999, (2) $20,000–34,999, (3) $35,000–69,999, and (4) $70,000 or greater. Marital status included (1) married or common-law, (2) widowed, (3) divorced or separated, and (4) never married. Urbanicity was classified as (1) rural or (2) urban. Region of residence was classified as (1) Northeast, (2) Midwest, (3) South, and (4) West.

Assessment of Psychiatric Disorders

To assess the prevalence of lifetime psychiatric disorders, trained interviewers used the AUDADIS-5, a computer-assisted diagnostic interview developed by the National Institute on Alcohol Abuse and Alcoholism based on the *DSM-5* criteria.[19,20]

We reported the lifetime prevalence rates of substance use disorders (including alcohol, cannabis, stimulants, opioids, tobacco, and other drugs like club drugs, cocaine, amphetamines, hallucinogens, heroin, sedatives, tranquilizers, and solvents/inhalants) as defined by the *DSM-5* classification. Additionally, we reported lifetime prevalence of mood disorders (such as major depressive disorder, bipolar disorder, and dysthymia), anxiety disorders (including panic disorder, social phobia, agoraphobia, specific phobia, generalized anxiety disorder, and PTSD), eating disorders (such as anorexia nervosa, bulimia nervosa, and binge eating disorder), and personality disorders (including schizotypal, borderline, and antisocial personality disorders).

Quality of Life

Quality of life was measured through the utilization of the SF-12 v2, a valid and widely used tool. The Short-Form 12-Item Survey version 2 scales include a Physical Component Summary (PCS), a Mental Component Summary (MCS), and 8 subscales that cover various aspects of quality of life such as physical functioning, physical role, bodily pain, general health, vitality, social functioning, emotional role, and mental health,[21] with norm-based scores (mean [SD], 50 [10]; range, 0–100). Lower scores indicate higher levels of disability.

Statistics Analyses

We compared participants with and without self-reported sexual assault to assess (1) the prevalence of self-reported sexual assault and its sociodemographic characteristics in a US representative sample, (2) the associations between self-reported sexual assault and lifetime psychiatric disorders, and (3) the quality of life associated with self-reported sexual assault.

We analyzed the data separately for the 3 following groups: (1) women participants, (2) men participants, and (3) women and men participants. The aim was to find out whether there was a difference between the two sexes. We computed weighted means, frequencies, and odds ratios (ORs) of sociodemographic correlates, and prevalence of psychiatric disorders. If numbers permitted, we carried out a sensitivity analysis excluding participants who had undergone sexual trauma in childhood, to specifically assess the weight of sexual trauma in adulthood. To compare the means of continuous variables, we used analyses of variance followed by post hoc tests. Adjusted ORs (aORs) were measured by using multiple logistic regression.

Several potential confounding factors were considered, including sex, race, nativity, age, education, income, marital status, urbanicity, and region. To account for the complex design of the NESARC-III, standard errors and 95% confidence intervals were estimated using SUDAAN, a statistical software package. Since the study was exploratory, there was no need for correction regarding multiple testing as stated by Bender and Lange in 2001.[22]

RESULTS

Sociodemographic Characteristics in Self-Reported Sexual Assault

Among the 36,309 adult participants in the NESARC-III, the prevalence of self-reported sexual assault was 2.6% (n = 922). Among the 15,862 male participants, the prevalence of self-reported sexual assault was 0.5%. Among the 20,447 women, the prevalence of self-reported sexual assault was 4.26%.

As summarized in Table 1, participants with self-reported sexual assault were more likely to be women, US-born, white, and Native American; to have lower incomes; to have been to college or higher; to be divorced or separated or never married; and to be living in urban areas than other participants.

Table 1.

Prevalence and Sociodemographic Characteristics of Individuals With and Without History of Adult Sexual Assault in the US General Population, 2012–2013[a]

	Controls (n = 35,387)		Sexual assault (n = 922)		Sexual assault vs controls	
Characteristic	%	SE	%	SE	OR	95% CI
Sex						
Men	48.95	0.30	10.73	1.20		ref
Women	51.05	0.30	89.27	1.20	**7.98**	**6.20–10.25**
Race/ethnicity						
White	66.01	0.77	73.95	1.70		ref
Black	11.84	0.66	9.75	1.00	**0.74**	**0.58–0.91**
Native American	1.51	0.12	3.48	0.95	**2.05**	**1.17–3.59**
Asian	5.82	0.47	1.92	0.71	**0.30**	**0.15–0.57**
Hispanic	14.82	0.68	10.89	1.02	**0.66**	**0.54–0.80**
Nativity						
US born	83.85	0.49	92.79	0.86		ref
Foreign born	16.15	0.49	7.21	0.86	**0.40**	**0.31–0.52**
Age						
18–29 y	21.66	0.37	22.46	1.69		ref
30–44 y	25.70	0.34	26.91	1.57	1.01	0.81–1.26
45–64 y	34.89	0.33	41.07	1.92	1.14	0.91–1.41
65+ y	17.75	0.37	9.55	1.04	**0.52**	**0.39–0.69**
Education						
Less than high school	13.07	0.43	10.42	1.17		ref
High school	61.05	0.76	21.33	1.76	1.03	0.77–1.38
Some college or higher	25.88	0.52	68.24	2.09	**1.40**	**1.07–1.83**
Individual income						
$0–$19,999	44.08	0.57	55.41	1.91		ref
$20,000–$34,999	20.68	0.29	18.74	1.46	**0.72**	**0.59–0.88**
$35,000–$69,999	22.55	0.31	19.94	1.77	**0.70**	**0.56–0.88**
>$70,000	12.69	0.39	5.91	0.99	**0.37**	**0.26–0.53**
Marital status						
Married/common-law married	58.11	0.52	45.56	1.96		ref
Widowed	5.81	0.17	5.22	0.79	1.15	0.83–1.58
Divorced/separated	13.59	0.24	25.65	1.71	**2.41**	**1.98–2.93**
Never married	22.49	0.45	23.57	1.58	**1.34**	**1.10–1.62**
Urbanicity						
Urban	78.73	1.54	79.54	1.91		ref
Rural	21.27	1.54	20.46	1.91	0.95	0.81–1.12
Region of residence						
Northwest	18.32	0.52	15.05	1.81		ref
Midwest	21.46	0.43	22.07	1.95	1.25	0.90–1.73
South	37.05	0.89	37.15	2.42	1.22	0.89–1.67
West	23.17	0.90	25.73	2.04	1.35	1.01–1.82

[a]Numbers are unweighted, percentages are weighted values. Significant differences are in bold.
Abbreviations: OR = odds ratio, ref = reference group.

Lifetime Prevalence of Psychiatric Disorders Among Participants Who Self-Reported Sexual Assault

Approximately 8 out of 10 (85.25%) participants with self-reported sexual assault presented at least 1 lifetime psychiatric disorder compared to 56.22% in the control group (aOR = 3.86, 95% CI, 3.12–4.76). All psychiatric disorders assessed were significantly associated with sexual assault (Table 2). For instance, participants with a sexual assault history presented more suicide attempts (aOR = 4.69, 95% CI, 3.88–5.67), more personality disorders (aOR = 3.80, 95% CI, 3.24–4.44), and more PTSD (aOR = 6, 95% CI, 4.95–7.28) than the control group.

Furthermore, participants with self-reported sexual assault often had a combination of several psychiatric disorders. 54.17% of self-reported sexual assault had 3 or more psychiatric disorders.

Lifetime Prevalence of Psychiatric Disorders Among Men Who Self-Reported Sexual Assault

Among the 15,862 men participants in the NESARC-III, the prevalence of self-reported sexual assault was

Table 2.

Association Between Psychiatric Disorders Among Individuals and History of Adult Sexual Assault in the US General Population, 2012–2013[a]

	Sexual assault vs controls					
	Whole sample N = 36,309		Men N = 15,862		Women N = 20,447	
	aOR[b]	95% CI	aOR[b]	95% CI	aOR[b]	95% CI
Any psychiatric disorder	**3.86**	**3.12–4.76**	**2.23**	**1.02–4.85**	**4.19**	**3.33–5.27**
Any substance use disorder	**2.43**	**2.07–2.85**	1.8	0.95–3.43	**2.51**	**2.14–2.94**
Alcohol use disorder	**1.84**	**1.56–2.16**	**1.82**	**1.00–3.31**	**2.51**	**2.05–3.07**
Nicotine dependence	**2.97**	**2.33–3.77**	**1.97**	**1.17–3.32**	**1.82**	**1.54–2.16**
Drug use disorder	**2.8**	**2.41–3.26**	**2.51**	**1.35–4.66**	**3.08**	**2.41–3.94**
Any mood disorder	**2.8**	**2.41–3.26**	**2.29**	**1.35–3.88**	**2.89**	**2.46–3.39**
MDE	**2.13**	**1.83–2.48**	**1.96**	**1.10–3.50**	**2.16**	**1.85–2.51**
Dysthymia	**2.61**	**2.03–3.36**	**4.14**	**1.97–8.69**	**2.49**	**1.93–3.20**
Any bipolar disorder	**3.23**	**2.40–4.33**	2.03	0.70–5.85	**3.46**	**2.52–4.76**
Bipolar I	**3.45**	**2.48–4.81**	2.62	0.82–8.34	**3.61**	**2.54–5.13**
Bipolar II	**2.25**	**1.22–4.16**	0.58	0.08–4.29	**2.63**	**1.33–5.21**
Any anxiety disorder	**2.48**	**2.07–2.98**	**2.14**	**1.10–4.16**	**2.53**	**2.11–3.03**
Specific phobia	**1.85**	**1.48–2.31**	0.85	0.29–2.46	**1.93**	**1.54–2.42**
Social anxiety disorder	**2.49**	**1.85–3.34**	2.49	0.87–7.16	**2.47**	**1.79–3.42**
Panic disorder	**2.74**	**2.18–3.44**	**4.78**	**2.07–10.99**	**2.6**	**2.10–3.23**
Agoraphobia	**3.09**	**2.17–4.41**	2.57	0.63–10.49	**3.11**	**2.14–4.53**
Generalized anxiety disorder	**2.34**	**1.91–2.87**	**2.2**	**1.07–4.52**	**2.35**	**1.92–2.88**
Posttraumatic stress disorder	**6**	**4.95–7.28**	**6.62**	**3.19–13.72**	**5.96**	**4.87–7.30**
Any eating disorder	**2.54**	**1.83–3.52**	0.43	0.06–3.29	**2.63**	**1.87–3.69**
Anorexia	**3.03**	**1.90–4.82**	1.77	0.23–13.68	**3.07**	**1.91–4.93**
Bulimia	**3.59**	**1.61–7.99**	–	–	**3.63**	**1.62–8.13**
Binge	**2.02**	**1.33–3.09**	–	–	**2.15**	**1.40–3.31**
Any personality disorder	**3.8**	**3.24–4.44**	**3.58**	**1.95–6.58**	**3.83**	**3.28–4.48**
Antisocial personality disorder	**2.69**	**1.66–4.37**	**3.76**	**1.62–8.71**	**2.48**	**1.49–4.13**
Borderline personality disorder	**4.12**	**3.50–4.84**	**4.62**	**2.50–8.56**	**4.06**	**3.45–4.77**
Schizotypal personality disorder	**3.73**	**3.00–4.64**	**3.3**	**1.49–7.30**	**3.81**	**3.04–4.78**
Psychotic disorder	**2.71**	**1.85–3.96**	**6.65**	**3.14–14.09**	**2.27**	**1.49–3.47**
Any of the above disorders/at least 1	**4.15**	**3.32–5.18**	**2.94**	**1.41–6.12**	**4.35**	**3.45–5.50**
Exactly 1	**0.7**	**0.57–0.85**	0.73	0.37–1.44	**0.7**	**0.56–0.87**
Exactly 2	1.03	0.84–1.26	1.14	0.55–2.39	1.01	0.83–1.23
3 or more	**3.94**	**3.37–4.61**	**3.08**	**1.77–5.34**	**4.1**	**3.46–4.86**
Exactly 3	**1.63**	**1.29–2.06**	1.38	0.64–3.00	**1.68**	**1.31–2.16**
4 or more	**3.96**	**3.33–4.70**	**3.5**	**1.87–6.57**	**4.04**	**3.40–4.82**
Suicide attempt	**4.69**	**3.88–5.67**	**5.01**	**2.59–9.72**	**4.67**	**3.80–5.74**

[a]Percentages are weighted values. Significant differences are in bold ($P < .05$).
[b]Odds ratios were adjusted for sex, race, nativity, age, education, income, marital status, urbanicity, region and number of criteria, and estimated through logistic regression.
Abbreviations: aOR = adjusted odds ratio, MDE = major depressive episode.

0.53% (n = 85). About 8 out of 10 (78.27%) men participants with self-reported sexual assault presented at least 1 lifetime psychiatric disorder compared to 58.09% in the men control group (aOR = 2.23, 95% CI, 1.02–4.85). Suicide attempt (aOR = 5.01, 95% CI, 2.59–9.72), PTSD (aOR = 6.62, 95% CI, 3.19–13.72), personality disorder (aOR = 3.58, 95% CI, 1.95–6.58), and psychotic disorder (aOR = 6.65, 95%, CI, 3.14–14.09) were particularly highly associated with sexual assault.

No association was found between any eating disorder and sexual assault, and eating disorders were less represented in men participants with self-reported sexual assault (0.35% vs 0.75%, aOR = 0.43, 95% CI, 0.06–3.29). No data were available on bulimia and binge eating.

Furthermore, men participants with self-reported sexual assault often had a combination of several psychiatric disorders. 45.54% who self-reported sexual assault had 3 or more psychiatric disorders (aOR = 3.08, 95% CI, 1.77–5.34).

Lifetime Prevalence of Psychiatric Disorders Among Women Who Self-Reported Sexual Assault

Approximately 8 out of 10 (86.09%) women participants with self-reported sexual assault presented at

least 1 lifetime psychiatric disorder compared to 54.43% of women in the control group (aOR = 4.19, 95% CI, 3.33–5.27).

Self-reported sexual assault by women participants was especially significantly associated with suicide attempt history (aOR = 4.67, 95% CI,3.80–5.74), PTSD (aOR = 5.96, 95% CI, 4.87–7.30), and personality disorders (aOR = 3.83, 95% CI, 3.28–4.48).

Furthermore, women who self-reported sexual assault often had a combination of several psychiatric disorders. 55.21% of the women who self-reported sexual assault had 3 or more psychiatric disorders (aOR = 4.10, 95% CI, 3.46–4.86).

Lifetime Prevalence of Psychiatric Disorders Among Women Without Childhood Sexual Trauma, With and Without History of Sexual Assault

In our population who experienced sexual assault in adulthood, 388 individuals (40.64%) also experienced childhood sexual assault (CSA). This subgroup is predominantly women, comprising 94.33%. Among our women population who experienced ASA, 366 (42.79%) also experienced CSA.

To specifically examine sexual assault occurring in adulthood, we performed a sensitivity analysis focusing exclusively on the 471 women participants who experienced ASA without a history of CSA (Table 3). Among them, 81.70% had any psychiatric disorder (aOR = 3.47, 95% CI, 2.70–4.47), and all psychiatric disorders examined were significantly associated with ASA. In particular, 29.00% of them had PTSD (aOR = 7.41, 95% CI, 5.58–9.84), 17.73% had a history of suicide attempts (aOR = 4.88, 95% CI, 3.69–6.44), and 31.54% a personality disorder (aOR = 3.63, 95% CI, 3.05–4.36).

Quality of Life of Individuals With and Without a History of Sexual Assault

Overall, the quality of life of participants with self-reported sexual assault was significantly lower than controls (Table 4). Both physical and mental subscores were lower in these individuals ($P < .0001$) compared to controls. All SF-12 subscales showed significant reductions.

Sex analysis showed the same pattern of results for women with sexual assault (Table 5). Men with sexual assault had a significantly lower quality of life, with a reduced MCS score (47.87 vs 51.92, $P = .0140$), whereas the PCS score showed no significant difference (47.86 vs 50.05, $P = .0754$) compared to controls (Table 5).

Table 3.

Lifetime Prevalence of Psychiatric Disorders Among Women Without Childhood Sexual Trauma, With and Without History of Sexual Assault in the US General Population, 2012–2013[a]

	Controls (n = 16,672)		Sexual assault (n = 471)		Without childhood sexual assault	
	%	SE	%	SE	aOR[b]	95% CI
Any psychiatric disorder	50.74	0.70	81.70	1.79	**3.47**	**2.70–4.47**
Any substance use disorder	32.44	0.61	58.28	2.81	**2.31**	**1.83–2.93**
Any mood disorder	25.43	0.54	51.85	2.40	**2.62**	**2.14–3.21**
Any anxiety disorder	17.64	0.46	35.86	2.50	**2.22**	**1.78–2.77**
Posttraumatic stress disorder	4.41	0.20	29.00	2.96	**7.41**	**5.58–9.84**
Any eating disorder	2.02	0.13	7.34	1.49	**3.02**	**1.91–4.76**
Any personality disorder	7.84	0.27	31.54	2.50	**4.63**	**3.66–5.86**
Psychotic disorder	1.74	0.19	5.51	1.35	**3.05**	**1.76–5.29**
Suicide attempt	3.64	0.19	17.73	1.70	**4.88**	**3.69–6.44**

[a]Percentages are weighted values. Significant differences are in bold ($P < .5$).
[b]Odds ratios were adjusted for race, nativity, age, education, income, marital status, urbanicity, region, and number of criteria, and estimated through logistic regression.
Abbreviation: aOR = adjusted odds ratio.

DISCUSSION

Among the 36,309 participants, 2.6% (n = 922) reported sexual assault, which corresponds to a national population projection of approximately 4,873,515 US adults. The lifetime prevalence of any psychiatric disorder is significantly higher among participants who experienced sexual assault after the age of 18 years compared to the control group (85.25% vs 56.22%). The psychiatric disorder most strongly associated with sexual assault experienced after the age of 18 is PTSD. Adult sexual assault was more strongly associated with any psychiatric disorder in women (aOR = 4.19, 95% CI, 3.33–5.27) than in men (aOR = 2.23, 95% CI, 1.02–4.85), with differences in the pattern of associated psychiatric disorders between sexes. Furthermore, the quality of life of participants with self-reported adult sexual assault was significantly lower than controls in both physical and mental subscores. In our study, the prevalence of adult sexual assault in the general population was 2.54%, which is lower than the figures for sexual assault reported in the literature.[22] This discrepancy may be because our study focused exclusively on adult sexual assaults after the age of 18, whereas most studies focus on sexual assault during childhood. Additionally, the data used in our study were collected between 2012 and 2013, a period before the widespread impact of movements like #MeToo, when societal discourse around sexual assault was less prominent, potentially leading to underreporting.[23] However, our data confirm the previously established sex imbalance, with a sex ratio heavily skewed toward women (1 man for every 8 women).[1,22]

One of the main findings of our work was the association between experiencing an adult sexual assault and psychiatric disorders. Many of these associations

Table 4.

Quality of Life and Number of Psychiatric Disorders Among Adult Sexual Assault Victims: A Comparison With Controls in the US General Population, 2012–2013[a]

	Controls (n = 35,387)		Sexual assault (n = 922)		
	Mean	SE	Mean	SE	*P* value
Number of Axis I lifetime disorders	**1.25**	**0.02**	**2.97**	**0.11**	**<.0001**
Number of psychiatric disorders (including personality disorders)	**1.41**	**0.02**	**3.52**	**0.14**	**<.0001**
Short Form (SF)-12 revised scores					
SF-12 summary scales					
Physical Component Summary (PCS)	**49.60**	**0.14**	**46.95**	**0.48**	**<.0001**
Mental Component Summary (MCS)	**50.99**	**0.08**	**44.95**	**0.45**	**<.0001**
SF-12 subscales					
Physical functioning	**50.64**	**0.12**	**47.77**	**0.42**	**<.0001**
Role physical	**49.26**	**0.11**	**45.65**	**0.40**	**<.0001**
Bodily pain	**49.75**	**0.14**	**45.73**	**0.54**	**<.0001**
General health	**49.04**	**0.14**	**44.80**	**0.54**	**<.0001**
Vitality	**52.16**	**0.09**	**47.88**	**0.35**	**<.0001**
Social functioning	**50.78**	**0.10**	**44.77**	**0.49**	**<.0001**
Emotional	**48.55**	**0.12**	**43.75**	**0.47**	**<.0001**
Mental health	**51.89**	**0.09**	**45.93**	**0.45**	**<.0001**

[a]Significant differences are in bold (*P* < .05). Adjusted for sex, race, nativity, age, education, income, marital status, urbanicity, region and number of criteria, and estimated through linear regression.

Table 5.

Quality of Life Among Women and Women With or Without Sexual Assault in the US General Population, 2012–2013[a]

	Women					Men				
	Controls (n = 19,610)		Sexual assault (n = 837)			Controls (n = 15,777)		Sexual assault (n = 85)		
	Mean	SE	Mean	SE	*P* value	Mean	SE	Mean	SE	*P* value
Number of Axis I lifetime disorders	1.26	0.02	3.03	0.11	**<.0001**	**1.24**	**0.02**	**2.49**	**0.30**	**.0002**
Number of psychiatric disorders (including personality disorders)	1.41	0.03	3.57	0.14	**<.0001**	**1.42**	**0.03**	**3.11**	**0.41**	**.0002**
Short Form (SF)-12 revised scores										
SF-12 summary scales										
Physical component summary (PCS)	49.17	0.15	46.84	0.53	**<.0001**	50.05	0.17	47.86	1.39	.0754
Mental component summary (MCS)	50.11	0.10	44.60	0.48	**<.0001**	**51.92**	**0.11**	**47.87**	**1.43**	**.0140**
SF-12 subscales										
Physical functioning	49.86	0.13	47.43	0.46	**<.0001**	51.46	0.15	50.54	1.07	.4243
Role physical	48.65	0.12	45.58	0.43	**<.0001**	**49.90**	**0.13**	**46.25**	**1.48**	**.0126**
Bodily pain	49.25	0.15	45.59	0.60	**<.0001**	**50.27**	**0.16**	**46.90**	**1.53**	**.0278**
General health	48.79	0.15	44.71	0.57	**<.0001**	**49.30**	**0.18**	**45.56**	**1.83**	**.0229**
Vitality	51.21	0.10	47.57	0.40	**<.0001**	53.15	0.12	50.47	1.34	.0825
Social functioning	50.15	0.11	44.44	0.51	**<.0001**	**51.44**	**0.12**	**47.51**	**1.81**	**.0469**
Emotional	47.80	0.13	43.53	0.51	**<.0001**	**49.32**	**0.15**	**45.56**	**1.59**	**.0215**
Mental health	50.91	0.11	45.53	0.47	**<.0001**	**52.90**	**0.11**	**49.26**	**1.48**	**.0440**

[a]Significant differences are in bold (*P* < .05). Adjusted for race, nativity, age, education, income, marital status, urbanicity, region, and number of criteria, and estimated through linear regression.

were common to both men and women. This association between adult sexual assault and psychiatric disorders may be bidirectional; it has been suggested that the experience of a sexual assault could increase vulnerability to psychopathology through the emergence of distorted cognitions.[14] These could facilitate the development of avoidance behaviors, mood alterations, and behavioral changes. Conversely, psychopathology might increase the risk of sexual assault, particularly through reduced abilities to identify and avoid dangers.

Notably, we found that the psychiatric disorder most strongly associated with adult sexual assaults in both sexes was PTSD. This strong association has also been observed in other studies of people who have experienced a lifetime sexual assault.[17] Sexual assault is associated with a higher risk of PTSD than other types of trauma.[24] It has been found that up to 75% of people may suffer from PTSD 1 month after a sexual assault, and 42% after 2 years.[25]

Furthermore, the association between sexual assault and suicide attempts was particularly strong for both men (aOR = 5.01) and women (aOR = 4.67). In women, rape is associated with a higher number of suicide attempts, and a history of childhood sexual assault as well as traumatic life events are associated with an increased likelihood of suicide attempts.[27] The cumulative exposure to trauma, both sexual and nonsexual, influences suicidality, and it is therefore important to take this into account when assessing suicide risk in patients who have experienced adult sexual assault.

In addition, men who had experienced adult sexual assault were found to be at the same risk of developing borderline personality disorder (BPD) (aOR = 4.66) as women (aOR = 4.06). Sexual assault has been previously shown to play an important role in the pathology of BPD. A history of sexual assault predicts a more severe clinical presentation and a worse prognosis.[28] This association appears to be bidirectional; according to a 10-year cohort study conducted in 2012, individuals with BPD were 3.88 times (95% CI, 2.99–7.56) more likely to have experienced an adult sexual assault over a decade than those with other personality disorders.[29] Adult sexual assault also predicts self-harm ($P < .01$)[30] and suicide attempts ($P = .007$)[31] over more than 10 years. The level of dissociation in BPD is also significantly associated with adult sexual assault ($P < .001$).[32]

Moreover, adult sexual assault was strongly associated with schizotypal personality disorder in both men (aOR = 3.30) and women (aOR = 3.81). To our knowledge, there are no studies specifically evaluating this association.

However, some associations with psychiatric disorders differed between men and women. While adult sexual assault was associated with personality disorders in both men (aOR = 3.58) and women (aOR = 3.83), the types of personality disorders associated differed.

In men, adult sexual assault was strongly associated with antisocial personality disorder (aOR = 3.76). The existing data are mainly concerned with sexual abuse in childhood,[33] which is a risk factor for antisocial personality disorder in both men and women.[34] The prevalence of antisocial personality disorder is 4 times higher in people aged 18–25 years who have experienced sexual abuse than in those who have not.[35] However, one study found that late sexual assaults were not associated with antisocial personality disorder.[36]

Adult sexual assault was much more strongly associated with psychotic disorders in men (aOR = 6.65) than in women (aOR = 2.27). Several studies have found that childhood sexual assault is more strongly associated with the risk of psychosis than other interpersonal traumas.[37,38] The accumulation of trauma and psychosis are correlated: experiencing more than 3 traumas in childhood increases the risk of psychotic experiences in adulthood by a factor of 4.7 times.[39] Another hypothesis is that the impact of trauma on the development of schizophrenia spectrum disorders is related not so much to the age at which the trauma occurred but rather to the perception of the event as the most difficult to endure, including its severity, chronicity, and recurrence.[40] The association of childhood sexual assault and lifetime sexual assault with psychiatric disorders has been extensively reviewed in the scientific literature. The phenomenon of revictimization is particularly alarming and common, with 47.9% of people who have experienced childhood sexual assault likely to be revictimized by an SA.[9]

The results of our sensitivity analysis, which focused exclusively on data from women who had experienced only adult sexual abuse, showed that the pattern of disorders was unchanged from the analysis that did not exclude women victims of childhood sexual assault. Similarly, the frequencies of associated psychiatric disorders were even higher when considering women who have experienced both adult and childhood sexual assaults. For example, 35.86% (aOR = 2.22, 95% CI, 1.78–2.77) of women who were victims of adult sexual assault suffered from anxiety in our sensitivity analysis, and 42.74% (aOR = 2.53, 95% CI, 2.11–3.03) of women when those who were also victims of childhood sexual assault were included. One study revealed that women who had been victims of multiple adult sexual assaults exhibited psychiatric disorders comparable to those who had been revictimized by childhood sexual assault in adulthood. These women showed significantly more depression, anxiety, and PTSD compared to women with no history of adult or childhood sexual assault, as well as those with a history of only 1 childhood sexual assault or 1 adult one.[41] Thus, the cumulative effect of trauma appears to be more important than the age at which sexual assault occurs.[41]

In terms of quality of life, our results were consistent with previous research indicating that lifetime sexual assault survivors suffer from severe physical and psychiatric symptoms that negatively affect their daily activities and general functioning.[13,17] In our study, the quality of life of men who had been sexually assaulted was significantly altered in terms of well-being; however, the difference in the physical component score was not statistically significant. In women, the results were even more pronounced and affected all aspects assessed: quality of life scores were significantly lower in both the

physical and mental components. This difference may be due to a lack of power, given the small numbers of men.

Limitations and Strengths of Our Study

First, the measurement of sexual assault relies on a limited number of retrospective questions, which may introduce recall bias, particularly among older people. Despite assurances of confidentiality, the stigma associated with psychiatric disorders and sexual violence, as well as desirability bias, may have led to underreporting. In addition, our study is cross-sectional, which prevents us from establishing a temporal sequence or causal association between sexual assault and psychiatric disorders. Moreover, although we have data on the age of onset for psychiatric disorders, we lack information regarding the exact timing of the sexual assault, which prevents us from determining the direction of the association between adult sexual assault and psychiatric disorders. Furthermore, a limitation of our study is the lack of detailed information on both the number and types of sexual assaults experienced by participants. Future research on this subject should include this information to obtain more precise data on the impact of each form of sexual assault and its recurrence.

Despite these limitations, our study uses data from the NESARC-III, which includes 36,309 subjects, providing nationally representative data. The instruments are rigorous and validated, with assessments based on *DSM-V* criteria, ensuring data quality and reliability.

CONCLUSION

This study highlights the association between adult sexual assault, psychiatric disorders, and quality of life and reveals significant sex differences in both the prevalence and consequences of adult sexual assault. These findings underscore the urgent need for prevention strategies and establishing appropriate support programs that take into account sex differences. It is imperative to develop targeted interventions to improve the living conditions of survivors. The results emphasize the crucial importance of systematic screening for adult sexual assault by health care professionals, as early detection is essential for effective intervention and support.

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References

1. Basile KC, Smith SG, Kresnow M, et al. *The National Intimate Partner and Sexual Violence Survey: 2016/2017 Report on Sexual Violence*. Centers for Disease Control and Prevention; 2022.
2. Brennan S, Taylor-Butts A. *Sexual Assault in Canada, 2004*. Canadian Centre for Justice Statistics; 2008.
3. Peterson C, DeGue S, Florence C, et al. Lifetime economic burden of rape among U.S. Adults. *Am J Prev Med*. 2017;52(6):691–701.
4. Dworkin ER. Risk for mental disorders associated with sexual assault: a meta-analysis. *Trauma Violence Abuse*. 2020;21(5):1011–1028.
5. Organisation mondiale de la santé, éditeur. *Rapport mondial sur la violence et la santé*. Organisation mondiale de la santé; 2002.
6. Heerde JA, Hemphill SA. Sexual risk behaviors, sexual offenses, and sexual victimization among homeless youth: a systematic review of associations with substance use. *Trauma Violence Abuse*. 2016;17(5):468–489.
7. Tyler KA. A comparison of risk factors for sexual victimization among gay, lesbian, bisexual, and heterosexual homeless young adults. *Violence Vict*. 2008;23(5):586–602.
8. Classen CC, Palesh OG, Aggarwal R. Sexual revictimization: a review of the empirical literature. *Trauma Violence Abuse*. 2005;6(2):103–129.
9. Walker HE, Freud JS, Ellis RA, et al. The prevalence of sexual revictimization: a meta-analytic review. *Trauma Violence Abuse*. 2019;20(1):67–80.
10. Caamano-Isorna F, Adkins A, Moure-Rodríguez L, et al. Alcohol use and sexual and physical assault victimization among university students: three years of follow-up. *J Interpers Violence*. 2021;36(7–8):NP3574–NP3595.
11. Dardis CM, Ullman SE, Rodriguez LM, et al. Bidirectional associations between alcohol use and intimate partner violence and sexual assault victimization among college women. *Addict Behav*. 2021;116:106833.
12. Khalifeh H, Oram S, Osborn D, et al. Recent physical and sexual violence against adults with severe mental illness: a systematic review and meta-analysis. *Int Rev Psychiatry*. 2016;28(5):433–451.
13. Nath A, Thakuria PK, Gogoi NK. A cross-sectional study on quality of life of survivors of sexual assault. *J Fam Med Prim Care*. 2024;13(1):368–371.
14. Dworkin ER, Menon SV, Bystrynski J, et al. Sexual assault victimization and psychopathology: a review and meta-analysis. *Clin Psychol Rev*. 2017;56:65–81.
15. Thomas JC, Kopel J. Male victims of sexual assault: a review of the literature. *Behav Sci*. 2023;13(4):304.
16. Peterson ZD, Voller EK, Polusny MA, et al. Prevalence and consequences of adult sexual assault of men: review of empirical findings and state of the literature. *Clin Psychol Rev*. 2011;31(1):1–24.
17. Schou-Bredal I, Bonsaksen T, Ekeberg Ø, et al. Sexual assault and the association with health, quality of life, and self-efficacy in the general Norwegian population. *J Interpers Violence*. 2022;37(3–4):1878–1901.
18. Grant BF, Goldstein RB, Saha TD, et al. Epidemiology of DSM-5 alcohol use disorder: results From the National Epidemiologic Survey on Alcohol and Related Conditions III. *JAMA Psychiatry*. 2015;72(8):757–766.
19. Hasin DS, Greenstein E, Aivadyan C, et al. The Alcohol Use Disorder and Associated Disabilities Interview Schedule-5 (AUDADIS-5): procedural validity of substance use disorders modules through clinical re-appraisal in a general population sample. *Drug Alcohol Depend*. 2015;148:40–46.
20. Grant BF, Goldstein RB, Smith SM, et al. The Alcohol Use Disorder and Associated Disabilities Interview Schedule-5 (AUDADIS-5): reliability of substance use and psychiatric disorder modules in a general population sample. *Drug Alcohol Depend*. 2015;148:27–33.
21. Ware J, Kosinski M, Keller SD. A 12-Item Short-Form Health Survey: construction of scales and preliminary tests of reliability and validity. *Med Care*. 1996;34(3):220–233.
22. Bender R, Lange S. Adjusting for multiple testing–when and how? *J Clin Epidemiol*. 2001;54(4):343–349.

23. Masho SW, Odor RK, Adera T. Sexual assault in Virginia: a population-based study. *Womens Health Issues*. 2005;15(4):157–166.
24. Worthen MGF, Schleifer C. #MeToo and sexual violence reporting in the National Crime Victimization Survey. *J Interpers Violence*. 2024;39(21–22):4215–4259.
25. Kessler RC, Aguilar-Gaxiola S, Alonso J, et al. Trauma and PTSD in the WHO World Mental Health Surveys. *Eur J Psychotraumatol*. 2017;8(sup5):1353383.
26. Dworkin ER, Jaffe AE, Bedard-Gilligan M, et al. PTSD in the year following sexual assault: a meta-analysis of prospective studies. *Trauma Violence Abuse*. 2023;24(2): 497–514.
27. Ullman SE, Najdowski CJ. Correlates of serious suicidal ideation and attempts in female adult sexual assault survivors. *Suicide Life Threat Behav*. 2009;39(1):47–57.
28. de Aquino Ferreira LF, Queiroz Pereira FH, Neri Benevides AML, et al. Borderline personality disorder and sexual abuse: a systematic review. *Psychiatry Res*. 2018; 262:70–77.
29. McGowan A, King H, Frankenburg FR, et al. The course of adult experiences of abuse in patients with borderline personality disorder and Axis II comparison subjects: a 10-year follow-up study. *J Pers Disord*. 2012;26(2):192–202.
30. Zanarini MC, Laudate CS, Frankenburg FR, et al. Predictors of self-mutilation in patients with borderline personality disorder: a 10-year follow-up study. *J Psychiatr Res*. 2011;45(6):823–828.
31. Wedig MM, Silverman MH, Frankenburg FR, et al. Predictors of suicide attempts in patients with borderline personality disorder over 16 years of prospective follow-up. *Psychol Med*. 2012;42(11):2395–2404.
32. Zanarini MC, Ruser TF, Frankenburg FR, et al. Risk factors associated with the dissociative experiences of borderline patients. *J Nerv Ment Dis*. 2000;188(1):26–30.
33. Afifi TO, Mather A, Boman J, et al. Childhood adversity and personality disorders: results from a nationally representative population-based study. *J Psychiatr Res*. 2011;45(6):814–822.
34. MARTENS WHJ. Multidimensional model of trauma and correlated personality disorder. *J Loss Trauma*. 2005;10(2):115–129.
35. Fergusson DM, Boden JM, Horwood LJ. Exposure to childhood sexual and physical abuse and adjustment in early adulthood. *Child Abuse Negl*. 2008;32(6):607–619.
36. Gobin RL, Reddy MK, Zlotnick C, et al. Lifetime trauma victimization and PTSD in relation to psychopathy and antisocial personality disorder in a sample of incarcerated women and men. *Int J Prison Health*. 2015;11(2):64–74.
37. De Loore E, Drukker M, Gunther N, et al. Childhood negative experiences and subclinical psychosis in adolescence: a longitudinal general population study. *Early Interv Psychiatry*. 2007;1(2):201–207.
38. Hahm HC, Augsberger A, Feranil M, et al. The associations between forced sex and severe mental health, substance use, and HIV risk behaviors among asian American women. *Violence Women*. 2017;23(6):671–691.
39. Croft J, Heron J, Teufel C, et al. Association of trauma type, age of exposure, and frequency in childhood and adolescence with psychotic experiences in early adulthood. *JAMA Psychiatry*. 2019;76(1):79–86.
40. Liu J, Mahendran R, Chong SA, et al. Elucidating the impact of childhood, adulthood, and cumulative lifetime trauma exposure on psychiatric symptoms in early schizophrenia spectrum disorders. *J Trauma Stress*. 2021;34(1):137–148.
41. Messman-Moore TL, Long PJ, Siegfried NJ. The revictimization of child sexual abuse survivors: an examination of the adjustment of college women with child sexual abuse, adult sexual assault, and adult physical abuse. *Child Maltreat*. 2000;5(1):18–27.