

**EXPLORING THE ASSOCIATIONS BETWEEN SEXUAL VIOLENCE HISTORY
AND REASONS FOR SEEKING CARE AT COLLEGE HEALTH CENTERS**

by

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ABSTRACT

Approximately 20-25% of females and 5-7% of males report experiencing sexual contact involving force or incapacitation on college campuses. While this is a major public health concern that impacts a student's mental, physical, and behavioral health, most unwanted sexual experiences go unreported. With 43-48% of students utilizing college health centers, campus health providers have the opportunity to intersect with victims of sexual violence (SV) and help to connect them to appropriate resources. The purpose of the current study was to (1) describe the reasons for care-seeking among students at college health or counseling centers (CHCCs) and (2) examine associations between reasons for care-seeking at CHCCs and SV status. Data used in this study comes from the College Health Study, which used a 2-arm cluster randomized controlled trial design with a sample of 2292 students from 28 colleges across Pennsylvania and West Virginia. This study found that a large proportion of care-seeking students (55.7%) have experienced sexual violence. Results show that students with a history of sexual violence victimization are more likely to visit college health centers for counseling and reproductive and sexual health care than non-victim students. Therefore, providers need to be prepared to recognize signs and respond to disclosure and colleges need to work toward a standard of policy and practice on SV knowledge and skills for anyone that comes in contact with college students.

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1.0 INTRODUCTION

Sexual contact involving force or incapacitation (a physical or mental state in which a person cannot make a rational, reasonable decision) is a serious issue that affects 20-25% of women and 5-7% of men on college campuses (Abebe). Trauma from sexual violence (SV) can lead to the development of mental health conditions, such as depression and Post Traumatic Stress Disorder (PTSD). It can also increase health risk behaviors, such as heavy drinking, smoking, and disordered eating (Kapur, Miller, Najdowski, Pinsky, Testa). Despite the high occurrence and substantial impact, many unwanted sexual experiences among college students go unreported and students often do not seek SV-specific care due to various barriers, such as fear and stigma (Abebe). However, students are likely to utilize services in college health and counseling centers (CHCCs), which are optimal sites for identification and intervention due to the high proportion of SV victims in clinical setting populations (Abebe, Lanthier, Miller). It is within these types of locations that recognition of SV-related patterns could help providers to better understand the student population affected by SV and ensure proper care for victims (Kazmerski). Given this, the purpose of the current study was to (1) describe the reasons for care-seeking among students at college health or counseling centers (CHCCs) and (2) examine associations between reasons for care-seeking at CHCCs and SV status (history of SV victimization or none at baseline).

The present study focused on a subset of the quantitative data from the baseline and exit surveys of the “College Health Study”, a longitudinal study evaluating the efficacy of a brief

intervention to decrease risk for alcohol-related sexual violence. The College Health Study used a 2-arm cluster randomized controlled trial design with a sample of 2292 students from 28 colleges across Pennsylvania and West Virginia (Abebe). In this thesis, survey data was analyzed using chi-squared tests to examine associations between student exposure to sexual violence victimization and reasons for seeking CHCC care.

Results from this study can be used in several ways. First, the results can be used for planning an integrated approach to provider care that addresses SV in areas such as SV training curriculums. Second, the findings can also be used to inform the decisions of student administrators and policy makers regarding the prioritization of student trauma resources and CHCC practices. Finally, the study findings can be used as evidence in support of the need for implementation of a trauma-informed care approach with universal SV education in student health centers.

2.0 BACKGROUND

2.1 PUBLIC HEALTH IMPORTANCE

Sexual violence, which encompasses all forms of sexual assault, rape, and unwanted sexual contact and non-contact experiences, is a serious public health concern. It is extremely prevalent in the United States, with nearly 1 in 3 women experiencing some form of SV in their lifetime, 1 in 6 women experiencing rape in their lifetime, and 1 in 6 men having a history of SV (Taylor). Results from the 2014 National Intimate Partner and Sexual Violence Survey (NISVS) found that approximately 1.27 million men and women had reported experiencing nonconsensual sex in the past 12 months (Stemple). SV can have long term effects on overall health, such as lifetime diagnosis of depression, anxiety disorders, sleep disorders, and eating disorders (Cadman, Testa). It is associated with increased risk for sexually transmitted infections, suicidal thoughts, and health risk behaviors, such as drug use (Cadman, Rich). Several studies have also found that sexual violence is linked to increased health care costs and decreased quality of life (Post, Trickett).

2.2 SEXUAL VIOLENCE ON COLLEGE CAMPUSES

According to the Bureau of Justice Statistics (BJS) National Crime Victimization Survey (NCVS) data, female college students ages 18-24 are 3 times more likely than women in the general population to experience SV. One third of the SV incidents among the female student population involve rape (Sinozich). Recent studies have found that among college students, approximately 20-25% of women report experiencing SV (Abebe). While the prevalence of SV is highest among female students, it is important to recognize that male students are also affected by SV. One study found that male students ages 18-24 are 4 times as likely (17%) to be a victim of SV than male non-students (4%) ages 18-24 (Sinozich). These statistics may be associated with the fact that among the college population, there are particularly high rates of binge drinking, which is a risk factor for experiencing rape (Sanci, Wolitzky-Taylor).

2.3 THE LINK BETWEEN SV AND CLINICAL SETTINGS

There is increasing recognition that clinical settings are optimal locations for SV-related interventions because SV survivors make up a large proportion (estimated 13% to 26%) of primary care clinic populations (Cadman). This is seen in clinical settings on college campuses as well, given that SV is more common among individuals under 25 years (Sinozich). The World Health Organization now identifies primary care, emergency services, gynecological services, mental health services, HIV services, and antenatal services all as key settings for addressing sexual violence ([Tarzia](#)). Through an understanding of their specific patient population and an awareness of common unexplained symptoms presented by SV victims,

primary care providers can play a vital role in the prevention of SV and connection to trauma-related services (Sumner). It is important to acknowledge that women who are victims of SV may not feel comfortable accessing formal victim services because they may not perceive themselves as being a sexual assault victim. This is especially true for victims whose perpetrator was an intimate partner. Clinic providers may be able to recognize common unexplained symptoms of these women, such as sleep disturbances, resistance to pelvic exams, anxiety, depression, PTSD, and self-harming behaviors, and connect them to appropriate services (Tarzia). With an estimated 43-48% of students utilizing college health centers, these sites can be strategically utilized for prevention and treatment of SV-related concerns, and connection to trauma-informed care (Abebe).

2.4 DISCLOSURE OF SV EXPERIENCES

Despite the high incidence of sexual violence, very few SV victims (5%) disclose their SV history to their physicians (Wolitzky-Taylor). Disclosure is often delayed to weeks, months, or years after a SV experience occurs (Lanthier). Among female college students, approximately 80% of SV victimizations go unreported and 83% of female student SV victims do not utilize victim services (Taylor, Sinozich). This is concerning because failure to report SV experiences can limit needed psychological and other medical care after an assault (Wolitzky-Taylor). One study found that only 11.5% of college women reported their rape experience to authorities and only 17.8% of rape victims sought assistance from victim agencies, such as rape crisis centers (Wolitzky-Taylor). This is most likely due to a combination of barriers that prevent students from disclosing their SV experience, such as stigma, fear, self-blame, and the belief that nothing

can be done (Abebe, Tarzia). A recent study found that their sample's most common barrier was the victim's belief that their SV experience was not severe enough (Stoner). Similarly, the Bureau of Justice Statistics (BJS) National Crime Victimization Survey (NCVS) found that student victims aged 18-24 were more likely than nonstudent victims of the same age to view their SV incident as not important enough to report (12% compared to 5%). The same report found that among student victims who did not report their SV incident to authorities, 20% did not do so out of fear of reprisal and 10% did not want to get their offender in trouble (Sinozich). Among male SV victims specifically, feelings of embarrassment, the belief that reporting is unmasculine, and the victim's fear that he will not be believed are all barriers to reporting SV experiences (Stemple).

2.5 CARE-SEEKING AND SV

Care-seeking behaviors are greatly affected by sexual violence experiences. Some studies have found that women with a history of SV utilize health centers at a greater rate than the general population—including increased hospitalizations, emergency department visits, and psychiatric evaluations (Kapur, Trickett). According to these studies, victims of abuse have 10% to 40% greater primary care costs and 13% to 43% greater total health care costs than the general patient population (Post, Taylor, Trickett). However, other studies have found that female SV victims avoid routine clinic visits and gynecological exams, which is of concern because avoidance of clinical visits can lead to late diagnoses and a higher risk for poor health outcomes (Taylor). One study found that victims of sexual assault were 1.5 times less likely than non-victims to have visited a physician in the past 12 months (Kapur). Cervical cancer screenings are among the

avoided exams by SV victims and reported reasons for avoidance include fear, shame, and the power disparity between patient and provider. Patients may also avoid these exams to prevent triggered responses such as dissociation, self-harm, and anxiety (Cadman). Among male victims, masculinity norms that encourage men to appear unemotional have been found to influence care-seeking behaviors. The societal stigma surrounding the idea of being “weak” often prevents victimized men from seeking needed support after SV (Donne). Additional predictors of care avoidance include negative reactions from others to SV disclosure. Such negative disclosure experiences are associated with increased severity of PTSD symptoms among SV victims (Littleton).

2.6 HEALTH-RISK BEHAVIOR AND SV

Health-risk behaviors such as smoking, heavy drinking, disordered eating habits, self-injury and other drug use are higher among patients with a history of sexual violence (Kapur, Testa). Behaviors involving substance abuse are often attempts to regain emotional control after trauma; a method known as self-medication. Compared to non-victims of crime, individuals who have been sexually assaulted are over 3 times more likely (52.2% vs. 15.5%) to use marijuana, 6 times more likely (15.5% vs. 2.6%) to use cocaine, and 10 times more likely to use other major drugs (12.1% vs. 1.2%) (Kilpatrick). Victims of sexual assault are 2 times as likely to currently smoke (Kapur). One study found that the incidence of bulimia nervosa was 2.5 times higher among participants who reported 1 childhood sexual abuse episode (occurring before age 16) and 4.9 times higher among those who reported 2 or more childhood sexual abuse episodes (Sanci). Individuals with a history of childhood sexual abuse are more likely to engage in high-risk

sexual behaviors, such as promiscuity, prostitution, and early sexual contact, which increase the risk for sexually transmitted diseases (Roller). Additionally, frequent physical and emotional abuse is associated with poorer sleep quality (Odds Ratio=2.6), increased sleep disturbances (Odds Ratio=3.5), and increased use of sleep medication (Odds Ratio=2.5). Fatigue from such sleep difficulties are linked to absenteeism from work, accidents, and reduced quality of life (Greenfield). Sexual violence is also a risk factor for chronic health conditions such as asthma, and high-risk behaviors further contribute to the risk of such conditions (Santaularia). Despite the abundance of negative behaviors that can develop after sexual violence, some individuals manage to develop healthy behaviors, such as regular physical activity, as means of coping (Substance abuse).

2.7 MENTAL HEALTH AND SV

Sexual violence can be extremely traumatic and have significant long-term impacts on mental health (Chen, Kilpatrick, Stemple, Walsh). It is well documented that female victims of SV are more likely to report symptoms of depression, anxiety, and Post Traumatic Stress Disorder (PTSD), which increases risk for re-victimization (Taylor, Testa). Within the 2 weeks after experiencing rape, 94% of women report PTSD symptoms (Rothbaum). It is estimated that 3.8 million women have had raped-related PTSD (Vickerman). Compared to individuals without a SV history, those who were sexually abused were 3.1 times more likely to have a lifetime diagnosis of anxiety disorders, 2.7 times more likely to be diagnosed with depression, 2.7 times more likely to be diagnosed with eating disorders, and 2.3 times more likely to be diagnosed with PTSD (Cadman). Women with SV histories are also more likely to experience feelings of guilt,

shame, and low self-worth, which could contribute to self-harm and worsen existing mental health problems (Cadman). Approximately 33% of women who experience rape contemplate committing suicide and 13% attempt suicide (Kilpatrick).

2.8 RELATIONSHIPS AND SV

Sexual violence can have significant long-term impacts on victims' interpersonal relationships. Common effects of sexual assault include emotional detachment, interpersonal disturbances, and re-victimization (Draucker). One cohort study of over 17,000 participants found that males and females with experiences of childhood sexual abuse were at a 40% increased risk of marrying an alcoholic, and a 40% to 50% increased risk of current marriage problems (Dube). Another study found that among survivors of SV, 37% report increased arguments and feelings of distrust with family members and friends. Also, 79% of victims who experienced sexual violence by a family member reported an increase in work or school-related problems (Langton).

Emotional dysregulation, such as increased difficulty in expressing and labeling emotions, can place additional stress on interpersonal relationships. Such emotional effects are common among women who experience sexual abuse in childhood or adulthood. Avoidance of intimate relationships is also seen among this population as a result of fear and distrust of men after SV (Draucker). Additionally, poor management of anger and frustration is seen in sexual abuse victims. Individuals who struggle with emotion regulation and interpersonal relationships may in turn have difficulty recognizing unhealthy relationships, which may then contribute to increased risk for revictimization (Iverson).

2.9 PHYSICAL HEALTH AND SV

Direct injuries from contact-involved sexual assault, such as genital bruising, tears, and abrasions, make up only a portion of the possible physical symptoms of SV (Linden). Sexual trauma is also associated with persistent urogynecological and obstetric problems, such as sexual dysfunction, bladder infection, dysuria, and menorrhagia (Taylor). Women with chronic pelvic pain (CPP) report higher rates of childhood sexual abuse (CSA) than women without CPP (Irish). Additionally, women who have experienced SV are at an increased risk for cervical cancer (Coker, 5). Common long term physical health problems correlated with sexual trauma among women also include abdominal pain, headaches, musculoskeletal pain, vaginal pain, and irritable bowel syndrome (Taylor). In some cases, somatic symptoms, such as respiratory, cardiovascular, neurological, gastrointestinal, and gynecological health disorders, can also manifest or be exacerbated following traumatic events (Irish, Larson).

2.10 UNIVERSAL SV EDUCATION AND TRAUMA-INFORMED CARE

Universal interventions are primary prevention strategies that are aimed at the general population regardless of individual risk (DeGue). Research has found that universal sexual violence education on college campuses can lead to positive changes in social norms, increased support for SV victims, and increased student ability and intention to intervene (Zapp). There are also benefits to using trauma-informed care, a treatment approach that involves understanding and responding to the various effects of trauma. By utilizing a trauma-informed care approach and providing universal SV education, CHCC providers can play a vital role in the prevention of SV

and connection to trauma resources, which could improve health outcomes (Abebe). Studies suggest the need for increased provider knowledge of the physical, psychological, and behavioral effects of SV to improve sensitivity and care for victims (Tarzia, Taylor).

3.0 METHODS

3.1 STUDY SETTING

The parent study sample included 2292 students seeking care at college student health and counseling centers across 28 co-ed campuses in Pennsylvania and West Virginia. The study team recruited campuses to participate by contacting the colleges' health centers (CHCCs), deans' offices, women's programs, and counseling centers. Eligibility criteria for college campuses required there to be an accessible student health or counseling center staffed by a health professional (i.e., nurse, nurse practitioner, physician, physician's assistant, counselor, etc.) who provides individual services to students at least five days a week. Of the 36 colleges approached for participation, 6 refused, 1 was not eligible, and 29 agreed to participate. Following randomization, 1 school withdrew, resulting in 28 participating colleges. At each location, one key stakeholder volunteered to assist with initial training and student recruitment.

3.2 PARTICIPANTS AND RECRUITMENT

Recruitment methods were tailored to individual CHC logistics (e.g., scheduled versus walk-in appointments) and preferences; they could choose one of the following methods or a combination of methods. Students with scheduled CHC appointments were informed of the study

by clinical staff and recruited in one of three ways: 1) clinical staff provided the study team contact information directly to the student, 2) clinical staff provided the study team with the student's contact information, or 3) students contacting the study team through Textmarks (www.textmarks.com), a text-messaging platform that allows for efficient communication between organizations and communities via an automatic short message service (SMS) response system. Students without scheduled appointments were informed of the study through printed flyers distributed by clinical staff at registration. Flyers contained basic study information (incentives, purpose of study, time required to participate). All interested students were directed to complete an eligibility survey through an electronic link, which screened for the following 4 criteria: 1) between the ages of 18-24 years, 2) able to understand English, 3) seeking care at college health center for any reason, and 4) have sufficient time to complete a 20-min survey prior to seeing their provider. A total of 2292 students enrolled and completed a baseline survey.

3.3 DATA COLLECTION

Using REDCap (an online survey platform), surveys were completed by participating students prior to their visit (baseline), directly after their clinic visit (exit), 4 months later (T2), and one year later (T3). Surveys were administered on either a computer or iPad in a private setting with a research assistant, or on the participant's personal phone, tablet, or computer (only if recruited online). Each student was assigned a distinctive identifier (study ID number) for their surveys to ensure the confidentiality of their survey responses.

3.4 DATA INCLUDED IN THE PRESENT ANALYSIS

Of the 2,292 baseline surveys collected, 2,097 were included in the present analysis. Participants were excluded if they did not complete the exit survey (n=194) or did not respond to any of the sexual violence questions (n=30). Four socio-demographic variables were used to describe the sample population (gender, race/ethnicity, and age). Key variables for this analysis were reason for visit, SV victimization (dichotomized to any or no victimization), and, type of appointment (health center, counseling, or both). Twelve modified items were used to assess the prevalence of SV victimization both before college (6 items) and since starting college (6 items). Participants reported the frequency of each item (0 through 4+ times) in the specified time frame (before college, since college).

3.5 DATA ANALYSIS

The analysis of the data proceeded in the following manner. First, descriptive statistics were used to characterize the sample (n=2097) and to explore differences in frequencies of presenting problems by sexual violence exposure and demographic characteristics. Responses for the 12 sexual violence questions (6 regarding before college and 6 regarding since college) were each recoded to binary variables (0=did not experience this type of sexual violence, 1=experienced this type of sexual violence). Three additional binary variables were then created to indicate if the student had experienced any type of sexual violence 1) at any time, 2) before college, and 3) since college. The 19 reasons for visit were summarized into 6 primary categories: 1) Acute medical visit, 2) Routine care, 3) Counseling, 4) Sexual and reproductive health care, 5) Injury

and 6) Other. These were then recoded to binary variables (0=did not report any of the reasons for visit within this category, 1=reported one or more of the reasons for visit within this category). Participants could select multiple reasons for their visit, thus categories are not mutually exclusive. Second, two-way tables were created for SV experience, reason for visit categories, and visit setting (health center, counseling, or both) variables. Chi-squared tests were used to assess whether gender, racial/ethnic background, and reason for visit varied by SV exposure. Significance was set at $p < 0.05$ for all analyses. Stata software program version 15 was used to analyze the survey data.

4.0 RESULTS

4.1 SAMPLE CHARACTERISTICS

The mean age of participants was 20 years (SD=1.5). Approximately 72% of participants identified as female, 27% as male, and less than 1% as another gender. The majority of respondents were White (68%), 13.7% were Hispanic, 9% were African American, and 9% were multiracial/other. See Table 1.

Table 1: Demographics

	n	%
Gender		
Male	552	26.71
Female	1,497	72.42
Other	18	0.87
Racial/ethnic background		
White	1,405	68.07
Black or African American	188	9.11
Hispanic	283	13.71
Other/multiracial	188	9.11
Age		
18	336	16.92
19	472	23.77
20	444	22.36
21	385	19.39
22	207	10.42
23	89	4.48
24	53	2.67

4.2 REASONS FOR CLINICAL CARE VISIT

As indicated in Table 2, the primary student-reported reason for seeking care at CHCCs was for cold/flu/cough/allergy/breathing or throat problems (27.5%), which was categorized in the Acute medical visit category (endorsed by 32.5% of participants). The second most common summary category was Other (25%) and no further description of what ailments were included in this category was available. Routine care was stated as the reason for the visit by 19.8% of respondents, followed by: Sexual and reproductive health care (13%), and Counseling (9%). Less than 1% of participants reported sexual assault as the primary reason for seeking CHCC care (0.58%).

Table 2: All Reasons for Visit

Reason for Visit	n	%
Acute medical visit	672	32.51
Cold/flu/cough/allergy/breathing or throat problems	568	27.48
Gastrointestinal illness (nausea/vomiting/diarrhea)	56	2.71
Fatigue/fever/other pain or symptoms	158	7.64
Routine care	410	19.84
Physical/Annual checkup	87	4.121
TB test	211	10.21
Immunization/Vaccination	138	6.68
Counseling	194	9.39
Mental health visit/counseling	164	7.93
Alcohol and other drug counseling	33	1.60
Sexual and reproductive health care	276	13.35
Condoms	12	0.58
Birth control other than condoms	91	4.40
Emergency Contraception (Plan B, or the morning after pill)	5	0.24
Pregnancy test	15	0.73
STD Test or treatment	81	3.92
Gynecological exam	56	2.71
Sexual assault	12	0.58
Painful urinations/sores/pain around genitals	48	2.32
Injury	105	5.08
Other	527	25.50
Transgender care	1	0.05
Other	526	25.45

4.3 REASONS FOR VISIT AMONG SAMPLE DEMOGRAPHICS

The most frequent reason for the medical visits of both male and female students in this study was for an acute medical problem—39% and 30% respectively. The two least common reasons for care among males were counseling (8.7%) and sexual and reproductive health care (7%). For females, counseling (9.4%) and injury (3%) were the least common reasons for seeking care. There were more females (15.8%) visiting for sexual and reproductive health care than males (7%). There were significantly fewer ($p < 0.05$) African American students (10.6%) seeking routine care than White participants (22%). See Table 3.

Table 3: Combined Demographics by Reason for Visit

			Acute medical visit	Routine visit/test	Counseling	S R H Care*	Injury	Other
Gender	Male (N=552)	n	215	91	48	39	56	133
		%	38.95	16.49	8.70	7.07	10.14	20.47
	Female (N=1,497)	n	455	318	141	236	48	385
		%	30.39	21.24	9.42	15.76	3.21	25.72
	Other (N=18)	n	2	1	5	1	1	9
		%	11.11	5.56	27.78	5.56	5.56	50.00
p-value			<.0001	0.018	0.024	<.0001	<.0001	0.043
Racial/ ethnic background	White (N=1,405)	n	460	310	135	152	62	354
		%	32.74	22.06	9.67	10.82	4.41	25.20
	Black or African American (N=188)	n	69	20	14	36	9	59
		%	36.70	10.64	7.45	19.15	4.79	31.38
	Hispanic (N=283)	n	89	52	26	42	22	70
		%	31.45	18.37	9.19	14.84	7.78	24.74
	Other (N=188)	n	54	28	19	45	12	42
		%	28.72	14.89	10.11	23.94	6.38	22.34
p-value			0.406	0.001	0.0792	<.0001	0.100	0.206
Age	18-19 (N=1,252)	n	416	231	121	166	74	314
		%	33.23	18.45	9.66	13.26	5.91	25.08
	20-21 (N=592)	n	182	129	50	81	26	161
		%	30.74	21.79	8.45	13.68	4.39	27.20
	22-24 (N=142)	n	37	40	19	20	3	30
		%	26.06	28.17	13.38	14.08	2.11	21.13

*Sexual and Reproductive Health Care

4.4 PREVALENCE OF SEXUAL VIOLENCE VICTIMIZATION

The prevalence of sexual violence victimization among males in this sample (n=552) was 31% and 64.6% among females (n=1,497). See Table 4. The overall prevalence of SV was 55.7%. See Table 6. While there is a significant difference by gender for history of sexual violence ($p < 0.0001$), there were no statistically significant differences in SV victimization history by age or race/ethnicity. Approximately 41% of participants reported unwanted sexual experiences that occurred before college, and 35% reported SV that occurred since beginning college. See Table 5.

Table 4: Gender, Race and Ethnicity by SV

	History of SV victimization			
	Yes		No	
Gender	n	%	n	%
Male	171	30.98	381	69.02
Female	967	64.59	530	35.40
Other	13	72.22	5	27.78
p-value	<.0001			
Racial/ethnic background	n	%	n	%
White	792	56.37	613	43.63
Black or African American	96	51.06	92	48.94
Hispanic	157	55.48	126	44.52
Other/multiracial	104	55.32	84	44.68
p-value	0.6232			
Age	n	%	n	%
18-19	677	54.07	575	45.93
20-21	349	58.95	243	41.05
22-24	82	57.75	60	42.25
p-value	0.2476			

Table 5: SV by 'Before College' and 'Since College'

When did you experience SV?	n	%
Before college	857	41.49
Since college	745	36.08

Table 6: Overall SV in Sample

	Yes	No
History of SV Victimization	%	%
	55.68	44.32

4.5 CARE-SEEKING PATTERNS AMONG VICTIMS OF SV

Among students who sought counseling at one to the CCHC sites, significantly more students ($p=0.0098$) experienced SV (67%) than did not. Among students who sought care for sexual and reproductive health concerns, significantly more ($p=0.0018$) experienced SV (66%) than did not. There was no significant difference for SV and acute medical visit ($p=0.2302$), routine care ($p=0.1555$), injury ($p=0.6141$), or other reasons for care (0.4743). See Table 7.

Table 7: Reasons for Visit by SV Victimization

Reason for visit	History of SV victimization				P-value
	Yes		No		
	n	%	n	%	
Acute medical visit	354	52.68	318	47.32	0.2302
Routine care	212	51.71	198	48.29	0.1555
Counseling	130	67.01	64	32.99	0.0098
Sexual and reproductive health care	181	65.58	95	34.42	0.0018
Injury	56	53.33	49	46.67	0.6141
Other	300	56.93	227	43.07	0.4743

5.0 DISCUSSION

The results of this analysis add to existing research on SV among college students and care-seeking patterns at college health centers. The prevalence of unwanted sexual experiences in this sample is alarmingly high (55.7%), and it is likely to be an underestimate due to reluctance around sharing SV experiences. This is especially true with the stigma around males experiencing SV (Donne). Similar to other studies (Dube, Mellins, Sinozich), reported incidents of SV were much higher among female students than male students in this sample (64.6%, 31.0%). Despite this difference, the high percent among males (31.0%) supports the need for future SV prevention interventions to be gender-inclusive.

Only a small proportion of students in this study (0.6%) reported sexual assault as their main reason for CHCC visit, despite the high occurrence of SV overall (55.7%). This is expected because SV victims rarely discuss SV experiences with their health care providers (31). Students who experienced SV were more likely to seek care for counseling and sexual and reproductive health than students who had not reported SV victimization. Approximately 67% of students coming in for counseling had a history of SV and 65.6% of students visiting CHCCs for sexual and reproductive health care had experienced SV prior to their visit. Therefore, providers need to be prepared to recognize symptoms, respond to disclosure, and be able to discuss and connect students to appropriate resources regardless of disclosure as part of routine practice. However, the existing literature suggests that providers do not know how to ask or

respond to SV-related issues (Lanthier). Continued efforts to increase the comfort and capacity of college health and counseling center providers in addressing SV in the context of routine care are needed.

The majority of students coming in for counseling have a history of sexual violence, which supports the need for colleges to place greater emphasis on strengthening counseling services to address exposure to SV. While ensuring well-trained counseling staff is one way to address this issue, recent studies have found that colleges have been unable to meet the rising demand for university counseling services in this manner (Lee). Wait times often exceed reasonable lengths, which can de-incentivize students from seeking care (Czyz). There is also existing literature that suggests that women avoid clinical exams after traumatic SV experiences (Taylor). Thus, to reach this untreated population, alternative methods need to be implemented or current methods need to be adapted.

6.0 CONCLUSION

Incorporating more accessible services to students, such as app-based mental health support programs, may be an alternative solution that would allow for greater opportunities for students to receive necessary post-trauma care. Mobile mental health support services are feasible, discreet, and capable of reaching a wide number of people. They also address common barriers to seeking on-campus counseling services, such as fear of stigmatization and lack of time (Lee). Colleges could also promote text-based crisis services to reach students who have experienced SV victimization. Crisis counselors of the Crisis Text Line, a free 24-hour national texting platform, can offer immediate support to depressed or anxious students from the convenience of their mobile devices. Crisis counselors are trained to de-escalate potentially life-threatening situations and can encourage students to seek local trauma resources (on and off-campus) via motivational communication techniques (Ramchand). Findings from this study could be used as support for advocating such initiatives on college campuses.

With regard to clinical settings, results from this study support the need for interventions to train campus providers in trauma-informed care and universal provision of educational materials related to the impact of SV on health. Equipping providers with such knowledge can address the high overall percentage of CHCC care-seeking students that have a SV history, which was made clear in this study. It is crucial that campus providers understand how to properly respond to SV disclosure because negative reactions to disclosure can be damaging to a

victim's recovery (Littleton). Educating providers on how to respond appropriately can help to prevent the negative consequences associated with poor SV disclosure responses, which include greater depression, physical health symptoms, and maladaptive coping (Lanthier). Recommendations for health care staff on how to create an environment conducive for disclosure and supporting disclosure is necessary. However, it may be most beneficial to incorporate methods of reaching students in ways that don't involve disclosure of SV history, to meet students where they are at and maintain their dignity. Additionally, creating a clear protocol to provide to college health center staff can be a simple, yet impactful strategy to addressing these types of situations. For example, there could be a booklet with sample scripts on how to respond to a student disclosure or how to ask questions if a student shows signs of sexual abuse victimization. Fortunately, the development and distribution of such materials can be achieved through low-cost interventions. In addition to these efforts, cross-campus protocols should be created for how college health services should work with counseling services and Title 9 offices regarding supporting students who experience SV while ensuring confidentiality and autonomy of survivors. Importantly, in keeping with national recommendations, from the American College Health Association colleges should work towards a gold standard of practice and policy around SV knowledge and skills for anyone who interacts with college students, including resident advisors, faculty, sports coaches, administrators, and campus security.

There are various limitations to this study. One of the main limitations is the reliance on self-reported data. The College Health Study utilized online survey questions, which is the recommended method for obtaining high-quality data on sensitive issues such as SV (Abebe). Another limitation is the study's limited geographical area; thus, findings may not generalize to other populations. This study was also population-specific, which could be useful in developing

future targeted interventions for care-seeking students, but makes it difficult to compare to other studies whose participants represent the entire student body. Measurement of reasons for visit was limited by the predetermined list of reasons provided to students during the survey. This list did not encompass all of the possible reasons students sought care, and a high proportion (25%) reported “other” as their reason for visit.

One of the strengths of this study is that SV was measured broadly. While other studies have focused specifically on sexual assault involving contact or solely on forced sexual intercourse (Campbell, Santiago), this study encompassed all forms of sexual assault, rape, and unwanted sexual contact and non-contact experiences. This is a strength because SV other than forcible rape can still have traumatic effects and long-term consequences on victims (Brown). However, it is important to acknowledge that using a broader definition can make it difficult to compare to other study findings due to varying definitions.

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