

INNOVATIONS AND EVOLVING DIRECTIONS IN BEHAVIORAL SCIENCE STUDIES

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Abstract: Many mental health issues are of concern to individuals, groups, therapists, evaluators, researchers and society in general. Substance use is one main concern that is growing in the population and is alarming healthcare workers, practitioners, and society at large. Data from Substance Abuse and Mental Health Services Administration (SAMHSA), Centers for Disease Control and Prevention (CDC), and other sources are discussed which note recent findings about substance use. Specific suggestions are recommended to increase likelihood of awareness and prevention of substance use disorder.

Key Words: Mental health; Concerns; Issues; Substance use

Introduction

Many mental health issues are of concern to individuals, groups, families, therapists, evaluators, researchers and society in general. Substance use is one main concern that is growing in the population and is alarming healthcare workers, practitioners, and society at large. Data from SAMHSA, CDC, and other sources are discussed which note recent findings about substance use.

The Substance Abuse and Mental Health Services Administration [1] published results from the 2020 national survey on drug use and health in October 2021. Findings indicated that 58.7% (162.5 million) of people ages twelve and older used tobacco (51.7 million), alcohol (138.5 million) or an illicit drug (37.3 million). Vaping devices or e-cigarette use accounted for over 20% of nicotine use. Of people 12 years and older 22.2% were binge alcohol users in the prior month. Binge drinking was reported the most for 18-25-year old's (31.4%) followed by people 26 years or older (22.9%) with adolescents accounting for 4.1% of binge drinking. Additionally, underage binge drinking and heavy alcohol use was reported to occur at a rate of 9.2%. Concerning illicit drug use, 21.4% aged 12 and older used illicit drugs in 2020 with marijuana being the most used drug (17.9%). It was noted that 3.7% of people misused central nervous system (CNS) stimulants (one-third cocaine; one-third prescription) including 14.4% using methamphetamine. Over 3% of people misused opioids including prescription (9.3 million) or heroin (902,000). Individuals between 18 and 25 years of age were the largest group misusing prescription pain medication and hallucinogens. SAMHSA reported that 40.3 million people had substance use disorders in 2020 with 6.5 million suffering from both alcohol use disorder and illicit drug use disorder. For adolescents, 2.7% suffered from a major depressive episode (MDE) and substance use disorder (SUD), whereas those 18

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years or older were at 6.7% for suffering from any mental illness (AMI) and SUD and 2.2% had serious mental illness (SMI) and SUD. SAMHSA reported that adolescents who had an MDE were more likely than other adolescents to use illicit drugs, binge drink, and use tobacco or engage in vaping. They reported adults who experienced AMI or SMI were more likely to use illicit drugs, marijuana, misuse opioids, binge drink, use tobacco, or engage in vaping. Sixty-nine percent of adolescents with SUD and MDE received treatment for one or the other condition and only 9% received treatment for both. Among adults, 50.5% received treatment for SUD or AMI and only 5.7% received assistance for both. Both adolescents and adults reported perceived negative impacts on mental health via COVID-19. Some adolescents and adults reported drinking more alcohol than preCOVID-19 [1].

Marijuana use among adults has been on the rise for some time but the use itself is not the only important factor. It has been found, although not completely understood, that an increase in suicidality, defined by Han et al [2], as ideation, plan, attempts, and death, is running parallel to the increase in marijuana usage. The only sociodemographic group that did not show an increase in daily cannabis use, suicidal ideation, and plan was high school students. [Han et al; 2] noted an increase in suicide attempts for most groups. They noted that cannabis use among adults increased from more than 22 million to 45 million, adults diagnosed with cannabis use disorder (CUD) rose from 3.4 to 4.1 million, daily use rose from 3.6 to 9.8 million, and parallel connections were noted with increases in major depressive episodes (14.5 to 19.4 million), suicidal ideation (8.3 million to 12 million), and deaths by suicide (over 35 to 45 million). Authors cited studies linking associations between CUD and depression, suicidal ideation, attempts, self-harm, and suicide. Other research Filbey, et al [3] indicated that marijuana use may be the most commonly used illicit drug by adolescents and also suggest its early onset use and continued use may result in thicker cortex among other results [3].

Alcohol and substance use are known to “significantly increase the risk of suicide in teenagers 16 and older” [p. 5; 4]. In general people who have chronic issues with alcohol are at a greater risk to die from suicide [5]. The World Health Organization (WHO) reports that there are 3 million deaths annually from abuse of alcohol resulting in 5.3 percent of all deaths. Additionally, it is reported that there is a causal relationship between alcohol use and infectious diseases, social and economic loss, injuries, and mental and behavioral disorders. For people between the ages of 20 and 49 years of age alcohol is the cause of 13.5% of deaths. WHO encourages raising awareness of harm by alcohol use, providing accessible and affordable treatment, and the implementation of screening and brief interventions to combat unhealthy drinking practices [Volkov; 6].

WHO reports that a half million deaths are due to drug use with 70% attributable to opioid-related use. Of these deaths over 30% are reported to be cases of overdose. Reportedly, there are effective treatment programs for dependence but only 10% who need such treatment receive it. In America opioid overdose, from 2010 to 2018, skyrocketed 120% with fentanyl being involved 66% of the time [7]. Additionally, methamphetamine-involved deaths increased from 5,526 to 15,489, reportedly a 180% increase and almost tripled in the time period between 2015 and 2019 [8]. It is also well established

that substance abuse is likely related to higher risks of suicide and this is known to be true for opioids as well as other drugs [5].

O'Donnell et al [9] indicated that drug overdose deaths increased in 2019, deaths in 2018 primarily involved deaths involving illicitly manufactured fentanyls (IMFs), and that deaths that involved stimulants including cocaine and methamphetamine and when used in combination with opioids were on the rise. Authors note that it is important to find opportunities for intervention prior to overdose including prevention of initiation of drug use. Over 68% of drug overdose deaths was by males and over 75% by White, non-Hispanic individuals. Individuals between 35 and 44 represented the highest percentage of these deaths (25.3%) followed by 25–34-year old's (24.7%), and 45–54-year old's (22.1%). Most deaths occurred in the home of the decedent (63.5%). Although for most overdoses the route was not identified (50.1%), 27.3% was injection,

14.7% ingestion, 10.7% snorting/sniffing, and 9.2% smoking. Opioids were involved in 81.5% of deaths followed by IMFs (61.5%), heroin (28.2%), prescription opioids (20.7%), or other opioids (.1%). Stimulants were involved 45.3% of the time including cocaine (28.3%), methamphetamine (17.6%), and prescription stimulants (2%). Eighty-five percent of the time IMFs, heroin, cocaine, or methamphetamine were involved in deaths by overdose with fifty percent of the time overdoses involving two or more of these drugs [9].

We also see that some groups are at higher risk for problems such as Native American and Alaskan Native adolescents regarding suicide [4]. People are at increased risk of attempting suicide when experiencing a mood disorder and engaging in substance abuse [4].

National Survey of Substance Abuse Treatment Services indicated that 15,961 facilities provide substance abuse treatment although over 14,000 of these are private non-profit or for-profit facilities [10]. There were few tribal (254), federal (333), state (310) and local, county, or community government (694) facilities. Number of clients reported to have alcohol and drug abuse treatment accounted for 33.4%, alcohol abuse only 14.4%, and drug abuse only 52.2%. Most facilities provided assessment and pre-treatment services such as screening for substance abuse (15,443) and many for mental health disorders (12,351), but 167 facilities did not offer any assessment and pretreatment services. Over 11% of facilities did not provide recovery support services such as mentoring/peer support, recovery coaches, or self-help group information. Substance abuse education was provided by 97% of facilities, and counseling services provided by 96.8%, however 83 facilities provided no educational or counseling services. Less than 50% of facilities provided medication for psychiatric disorders and over 34% provided no pharmacotherapy services. Ancillary services such as case management (82.7%), social skills development (75.1%), transportation assistance to treatment (46.2%), and mental health services (69.6%) were provided by some facilities although 3.7% of facilities did not provide ancillary services. Some facilities provided treatment for gambling disorder (26%), internet use disorder (15.1%), and other addiction disorder (non-substance abuse; 34.6) although the majority did not offer other services such as these (58%). When reporting clinical/therapeutic approaches used, most facilities reported providing substance abuse counseling (98.2%), followed by relapse prevention (96.1), cognitive behavioral therapy (93.7%), motivational interviewing (93.3%),

trauma-related counseling (82.2%), brief intervention (82%), and anger management (81%) to name a few. Tailored programs for clients with co-occurring mental and substance use disorders were provided by 52.5% of facilities [10].

SAMHSA [11] reported that white adults utilized mental health services the most between 2015 and 2019 (18.3%) followed by adults who reported two or more races (17.6%), American Indian or Alaska Native (14.4%), Black (8.9%), Hispanic (8.7%), Native Hawaiian or Pacific Islander (6.9%), and Asian (5.9%) adults. White adults also reportedly were prescribed more mental health medication than other groups (15.5%). Adults reporting two or more races had the highest rates of outpatient mental health services (10.2%). Inpatient mental health services were higher for Black adults (1.5%) than other groups. Past year substance use treatment at a specialty facility or mental health service was higher for White adults (54.6%) than other groups SAMHSA [11].

SAMHSA [12] additionally reported higher illicit drug use by individuals aged 12 years and older who identified as two or more races (28.5%) and American Indian or Alaska Native (25.9%). Past year alcohol use was reported the most by White (70.3%) followed by people reporting two or more races (61.4%). Those reporting two or more races (5%) and American Indian or Alaska Native (4.8%) reported more past year illicit drug use disorder than other groups. American Indian and Alaska Natives also reported higher rates of past year alcohol use disorder (8.3%) and substance use disorder than other groups. Whites had higher estimates (23.5%) of illicit drug use treatment and American Indian or Alaska Natives had higher alcohol use treatment (22.4%) and substance use treatment (24.8%) [11].

For youth substance use, White adolescents had the highest percentage of binge alcohol use (6%). Major depressive episodes (MDE) occurred 2.5 times more for females (23%) than males (8.8%) and occurred more for Whites (9.3%) than other groups. From 2015 to 2019 MDE increased from 19.5% to 23% for females and from 5.8% to 8.8% for males. Females (45.8%) received treatment at a higher rate for depression than males (36.8%) and White adolescents received treatment 50.3% of the time whereas Hispanic (36.8%) and African American adolescents (35.6%) received services less often. It was also noted that adults without insurance and those with less than 100% of the Federal Poverty Level had higher rates of thoughts of suicide than those with insurance (6.3% compared to 4.6% respectively). People aged 12 and older without insurance had higher rates of alcohol use disorder than those with insurance (7.3% compared to 5%). Nine out of ten people aged 12 and older with an alcohol use disorder (89.6%) and eight out of ten people with an illicit drug use disorder (82.2%) did not receive treatment and did not see a need for such treatment [13].

Discussion

Use of substances and occurrence of substance use disorders are on the rise. This appears to have increased the risk of mental health concerns, disorders, and risk of suicide. It is now more important than ever before to focus on intervention at all levels. Most importantly it is needed for facilities and individual medical and mental health providers to ensure screening for substance use and for targeted individualized interventions once individuals are known to be at risk or to be experiencing a SUD. Risk assessment for suicide is recommended when working with all persons who are using drugs and also

when diagnosed with a SUD. Alcohol use and substance use disorder (SUD) significantly increase the risk of suicide for individuals 16 and older. Many people believe that the use of marijuana is nonharmful and this myth must be dispelled. Adults' use of marijuana has been linked to increased major depressive episode, suicidal ideation, and death by suicide and this information must be reiterated to the public. Specific areas that appear to need further attention include possible disparities between rates of, types, and location of treatment per race/ethnicity. Possible research areas might include investigation of why major depressive episodes (MDE) are increasing for males and females. Additionally, a renewed evaluation of relation between low socioeconomic groups, poverty, and low income with thoughts of suicide should be considered. It might be prudent to also conduct research investigating causes of increased alcohol use associated with the COVID-19 pandemic.

Raising awareness of increased drug use and related mental health decline should be a priority in the United States. Prioritizing efforts geared toward making affordable treatment obtainable is needed. Implementing screening and brief interventions appear to be valuable ways to assist in combating the increasing difficulties related to drug and alcohol abuse. Additionally, increased monitoring and targeting of specific interventions for people with SUD is recommended. Facilities that treat SUD should include programs addressing mental health along with SUD. These facilities should also provide assessment services, and provide additional services such as counseling, education, mentorship, and information about resources available in the community for continued intervention once discharged from the facility. The number of tribal, federal, state, and local facilities geared toward work with individuals with SUD should be increased for additional locations of support for the increasing number of people suffering from SUD. Staff providing services at facilities need to be trained not only in the treatment of SUD but also in mental health supports including but not limited to risk assessment for suicide. Intervention in the form of psychoeducation appears to be warranted with adolescents and adults alike. Renewed drug awareness and prevention programs appear to be needed in schools, communities, and when working with all clients receiving therapy.

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