

Kent Journal of Psychiatry

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Alcohol Misuse in the Elderly

Ivan Saeger &
M. Aamer Sarfraz

Pride & Prejudice – Psychodynamics of Addiction

Adina Parkes

Cannabis and Psychosis – Cause and Cure

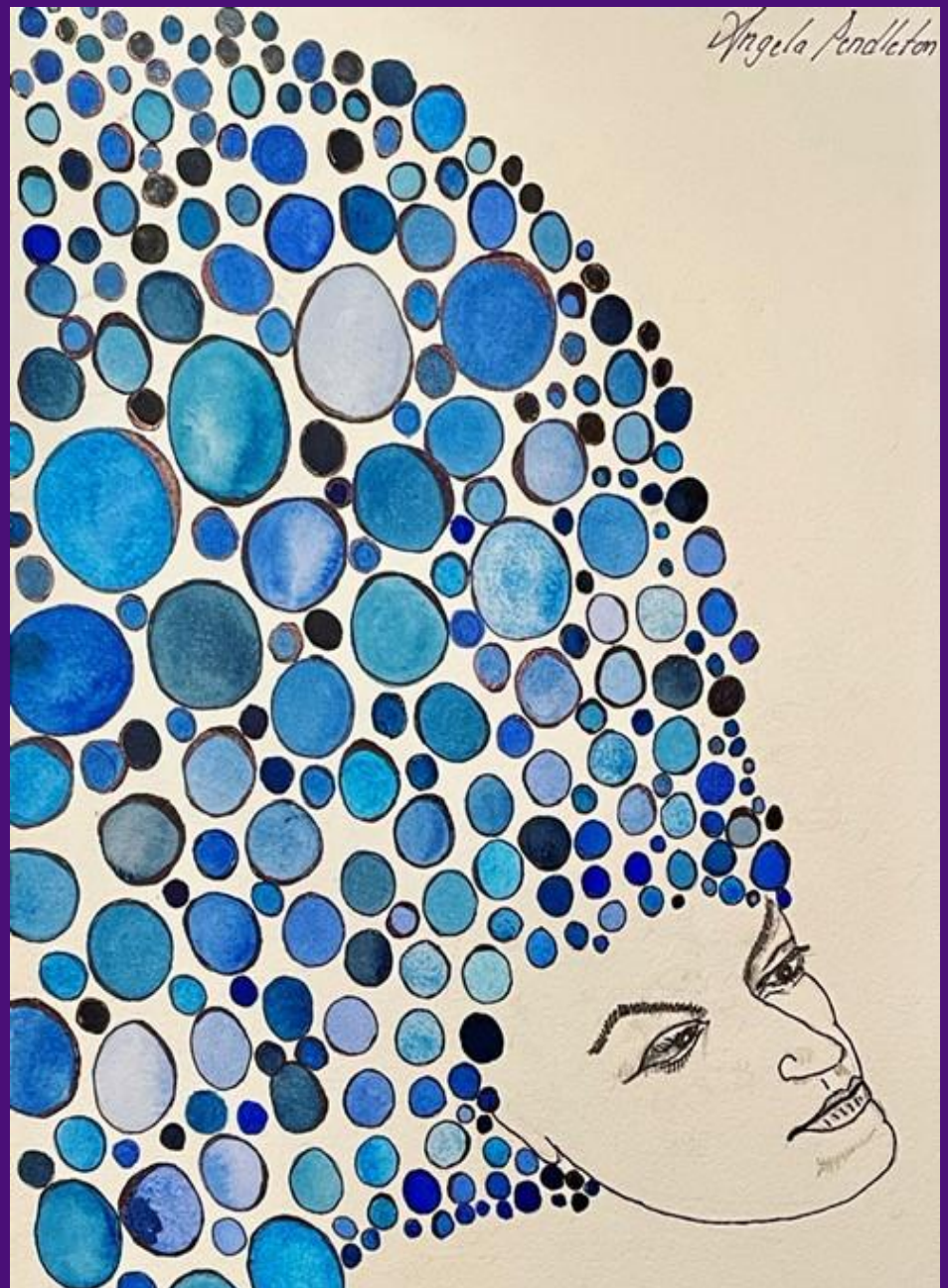
Rhian Bradley & Verity Williams

The vicious circle: the case for decriminalisation of illicit drugs

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Effectiveness of Crisis Resolution and Home Treat Team

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Editorial Introduction

Welcome to the latest edition of KJPsych. This edition is mostly based on the proceedings of a Masterclass on Drug & Alcohol Use Disorders. This domain is topical and is being actively reshaped by different stakeholders in terms of available treatments, interventions, and future governance, after years of neglect.

We have articles in this issue that update knowledge about the dire state of affairs in the management of alcohol misuse in the Elderly, those exploring psychodynamics of addictions, and the interesting relationship between Cannabis and Psychosis.

Dr Ben Harman-Jones has examined the vicious cycle of decriminalisation of illicit drugs with some disturbing conclusions. And finally, Dr Junaid et al review the efficacy of how a Crisis & Home Treatment Team performs with its wider implications.

Alcohol Misuse in the Elderly

Ivan Saeger & M. Amer Sarfraz

Alcohol abuse in the elderly is a complex and important subject. The elderly population is increasing, and Alcohol Use Disorders (AUD) are an underrecognized problem associated with major physical and psychological health complications in this group. In addition to lack of awareness and changing guidelines, current services are not equipped to assess and treat this diverse population due to unenthusiastic attitudes and inadequate training of healthcare professionals, diverse diagnostic criteria, and unfit screening instruments.

We have reviewed various aspects of this complex topic with a view to highlighting the associated issues, apprehensions, and myths.

Definition

There are historical variations in the standards used to define normal and pathological drinking. International Classification of Diseases (ICD-11) divides "Disorders due to the use of Alcohol" into subsections of harmful use, acute intoxication, and withdrawal. For alcohol dependence, two of the following are required: impaired control over alcohol use, increasing precedence of alcohol use over other aspects of life and physiological features indicating neuroadaptation to the substance present over a period of 12 months; or should alcohol use be continuous, then diagnosis may be made over 3 months [1].

Diagnostic and Statistical Manual of Mental Disorders (DSM-V) utilises the term "Alcohol Use Disorder" as a pattern of alcohol consumption, leading to problems associated with two or more of the following: tolerance, withdrawal, difficulties in controlling drinking, neglect of activities, time spent drinking or recovering from effects of alcohol, drinking despite physical/ psychological problems, craving, alcohol consumed in larger amounts or over longer periods than was intended, failure to fulfil major role obligations, recurrent alcohol use in hazardous situations, and drinking despite social/interpersonal problems. Depending on the

number of criteria met, Alcohol Use Disorder can be graded in severity as: 2-3 =mild, 4-5 =moderate and 6 or more = severe [2].

In addition to DSM-V and ICD-11, the American National Institute of Alcohol Abuse and Alcoholism (NIAAA) defines "at risk drinking" as consuming four drinks per day or 14 in a week for men, and more than three drinks a day or seven per week for women [3]. "Hazardous drinking" is the term favoured by the World Health Organisation (WHO), which broadly refers to a pattern of alcohol consumption that increases a person's risk of harm to physical and mental health, and its social consequences [1].

In the UK, healthcare professionals and the public have been guided by publications about the safe limits of drinking. Drinking Sensibly (1981) advised sensible limits as 21 units a week for men and 14 for women [4]. In 1995, the Department of Health's Sensible Drinking Report revised this to suggest that drinking less than four units for men and three for women per day, was the safe limit [5]. In 2016, there was a further revision in the Chief Medical Officer's report, which set the same limit for men and women at 14 units per week.

Prevalence

Estimating alcohol abuse is complicated and depends on the methodology used. For example, in the UK, 65 years and above would be considered "elderly", but global studies have used the age ranges of "50 and above" and "60 and above" [4,5]. Impairments in social, occupational, or recreational activities due to drinking can go undetected if the patient lives alone, has given up driving, and is retired with no risk of losing a job, and has no close family members. Moreover, AUD can mimic other common diagnoses in older adults, including depression and dementia. Stigma can also play a major role in the detection of AUD as many older individuals believe alcoholism to be a moral weakness, and denial is a common response to inquiry.

The amount of alcohol drunk per capita may have doubled over the last 50 years due to social values, individual freedom, and relatively cheap price of alcohol [6,7]. A recent survey in England [7], has highlighted the nation's drinking habits - 20% of the population had not drunk in the 12 months, 19% drank at increased risk, and 4% were considered at higher risk (>50 units weekly for men and >35 units weekly for women).

The Health Survey (2019) highlighted that increased-risk or higher-risk drinking increased by age group until 65 years; from 65 years to 75 years there was a slight decrease and at 75+ this number fell off sharply [8]. This fits in with the well-documented pattern of alcohol consumption in later life [9] where heavier drinkers die earlier, leaving behind lighter drinking survivors (the mortality hypothesis); older adults reduce alcohol consumption due to deteriorating health (the morbidity hypothesis); due to physiological changes older adults cope with less alcohol (the biological hypothesis); a cohort's drinking level is related to shared experiences and historical context rather than its stage of life (the cohort hypothesis); alcohol problems are self-limiting (the maturation hypothesis); and that it is difficult to measure accurately the drinking behaviour of older adults (the measurement hypothesis) [10].

Drummond et al [11], reported that 19.7% of the population drank at hazardous levels or above – in comparison with APMS data from 2007 and 2000, this was a stable level. However, compared to previous years, older adults aged 55-64 years were more likely to be drinking at harmful levels or above.

Nuevo et al [12] looked at data collected during 2002-2004 from 14 countries using the WHO World Health Survey about the alcohol consumption of adults aged 60 years and over. They found a pattern of decreasing alcohol consumption with increasing age - 10.2% were classified as heavy drinkers and a further 6.5% were heavy occasional drinkers.

In the US, the National Epidemiological Survey on Alcohol and Related Conditions III (NESARC-III) sampled over 36,000 people during 2012-2013. They reported a prevalence of 13.9% for all alcohol use disorders and 3.4% for severe alcohol use disorders. Consistent with comparable European

research, they found age was inversely related to the 12 months' prevalence of AUDs [13].

The Cost of Alcohol Consumption

Healthcare costs form almost half of the direct costs of alcohol consumption, including in terms of utilization of resources [14].

In recent years, the number of alcohol-related admissions in England rose with age up until 55-64 and then fell - 23% of admissions were people aged 55-64 and 31% those over 65 years [15]. If the criteria were expanded to include hospital admissions where the primary reason or a secondary diagnosis were linked to alcohol, then out of approximately 980 thousand admissions, 24% were for patients aged between 65 and 74 [16]. Similarly, Wadd et al [17] showed that the percentage increase for those over 65 was substantially greater than for those aged 25-64 and that alcohol-related age adjusted death rates were highest in the 55-74-year age group.

There is significant evidence for the causal role of alcohol for different cancers including oesophageal, liver, colon, rectum, and breast cancer and these show a dose-response relationship [18,19]. Alcohol has been shown to be a risk factor for cardiovascular disease and is one of 8 risk factors that account for 61% of cardiovascular deaths. It is also associated with fatty liver, alcoholic hepatitis and liver cirrhosis and the development of these diseases is related to both the duration and amount of heavy drinking [19].

The relationship between mental health and alcohol use is complicated. People with a mental health problem are more likely to misuse alcohol [31]. Alcohol misuse may physiologically cause mental health problems and hazardous drinking may lead to stress and subsequently poor mental health [20]. Mental health conditions may themselves influence changes in alcohol consumption. For example, individuals with personality disorder may be more likely to abstain entirely, whilst social anxiety disorder was chronologically associated with alcohol misuse [21,22,23].

Alcohol is the most used substance among adults aged 65 or older [24]. It is estimated that one-third of older individuals suffering from AUD

developed the problem later in life [25]. In addition, some studies indicate that binge drinking among older adults has increased in recent years [26]. Among older men, those who were married were least likely to drink heavily followed by those who are single (never-married) men. In contrast, among older women, those married had the highest levels of alcohol consumption.

In general, African–Caribbean, Muslim, and Hindu women emigrated to the UK reported drinking less than their white counterparts. But among Asian Muslims, Sikhs and Hindus, older men had more alcohol problems than younger men. A combination of ‘Irish’ (greater number of drinks per drinking session) and ‘English’ (greater number of days engaged in drinking) drinking patterns may also be responsible for the greater risk of harmful drinking. This is further compounded by negative stereotyping and low rates of primary care consultation in the Irish population. These factors may influence their access to alcohol services [17].

According to the Office of National Statistics (2016), people aged over 65’s made up 18% of the total UK population and by 2066, this will increase to 26% [19]. Therefore, a focus on older adults and alcohol is justified not only for the benefit of the health of that community but also to mitigate an increasing financial and social burden to the state and healthcare provision [17].

Diagnosis and Management

There are several issues and myths about diagnosing and treating alcohol abuse in the elderly. The most important step in managing AUD starts with identification, followed by stabilizing the patient medically and psychiatrically by managing medical comorbidities, ensuring a safe detoxification, and addressing comorbid low mood, anxiety, psychotic, or cognitive issues.

As a cohort, older people may be vulnerable to alcohol because its harmful effects almost all occur in a dose-dependent relationship and are cumulative over time²⁷. While physiological changes expose them to higher peak blood ethanol levels for a given amount of alcohol consumed [28], elderly may have several other factors which negatively interact with alcohol e.g., prescribed medications.

The elderly may have diminished pedal stability and are at higher risk of falls, with estimates suggesting that alcohol may be a factor in approximately 10% of those presenting to the emergency department [29]. While falls and delirium were more frequent presenting symptoms when compared with controls, several other factors including cardiovascular disease, gastrointestinal problems, sleeping difficulties and depression can mask a presentation of AUD [30, 31, 32].

All types of dementia, except Alzheimer’s Disease, occur more commonly in the elderly with alcohol use disorders. The reasons for this are not clear, as the relationship between alcohol use and dementias is very complex. Cognitive impairment stemming from alcohol misuse has been flagged as a silent but approaching epidemic.

Attempts to investigate this relationship, however, been hampered by confounding factors that may accompany the lifestyles of alcohol abusers, such as head injury, psychiatric and other substance abuse co-morbidities, and a higher rate of vascular risk factors [33]. The term ‘alcohol related dementia’ has been suggested to describe 10% of all dementias; this figure is based upon a population where 700,000 people had dementia, with lower levels of alcohol use than in younger cohorts [7, 11].

Alcohol misuse and psychiatric illness may coexist in late life, and dual diagnosis is not uncommon. Some studies found that the elderly were more likely to have the triple diagnosis of alcoholism, depression, and personality disorder [34]. Estimates of primary mood disorders in older alcohol misusers vary from 12% to 30% [35]. Coexisting depression has a more complicated course in alcohol users, and older people abusing alcohol have an increased risk of suicide and greater social dysfunction than non-depressed alcoholics. A history of AUD is also an indicator of a poorer response to treatment of late-life depression. More infrequently, other psychiatric disorders such as schizophrenia may coexist with alcohol problems and complicate the treatment of both.

Services should consider motivations for drinking in the elderly population, which may differ from those of their younger counterparts. When Wadd et al (2020) surveyed approx. 16,000 adults aged over 50, they found that over half of those

drinking at a hazardous level identified a loss of sense of purpose in life as a reason for drinking, and the most common reason for drinking amongst both low risk and hazardous drinkers was retirement [5].

Regarding detoxification, withdrawal symptoms may vary in severity and the elderly should be monitored closely for delirium or seizures. Benzodiazepines are used for detox because they are more effective due to simpler hepatic degradation. If benzodiazepines do not control the symptoms and severe agitation continues, haloperidol may be used with caution. In addition, β -blockers are shown to be effective in controlling tachycardia and hypertension, but they must be monitored due to risk of hypotension in older adults. In addition to using a suitable setting (community, inpatient, or rehab), a combination of cognitive behavioural therapy and support groups, such as Alcoholics Anonymous, are effective when combined with pharmacotherapy [36].

Pharmacotherapy options includes naltrexone, which is recommended for relapse prevention. Acamprosate has shown similar results as naltrexone but has not been studied specifically in older adults. The use of combined naltrexone and acamprosate may produce slightly better results in certain cases. Disulfiram must be used with caution in older adults due to an increased risk of adverse effects like tachycardia and hypotension. Finally, providing structure to an older person's daily routine and removing access to alcohol are strategies known to improve outcomes.

There is evidence that healthcare professionals are less adept at detecting alcohol use disorders in older populations, however, it has been found that alcohol history is less likely to be taken with increasing age of the patient [37]. Results from work carried out among social workers similarly found that it was difficult to identify alcohol and drug misuse among the elderly [38, 17].

Age Concern [39] have highlighted difficulties in identification and onward referral of older adults with AUDs. In a report published in 2003, they suggested that the reasons for this may include ageist assumptions about the lifestyles of this population, a lack of knowledge of safe-drinking limits, and individuals' reluctance to ask for help [39]. Wadd et al discussed that the elderly struggled

to access available and effective treatment, which was more tailored towards a younger population [17, 40].

Primary Care is the intended gateway to services for alcohol use disorders in the UK. General Practitioners (GPs) screen for AUD, offer interventions and advice, and refer to specialist alcohol services when needed [41,42]. GPs were identified as the primary source of help for alcohol problems in some studies, with some evidence that people might cut down drinking in response to their advice [43]. This pathway, however, belies a radical shift over the last 20 years in the way that drug and alcohol services are funded and provided in the UK.

Historically in England, most commissioned drug and alcohol services were provided by NHS providers. However, since the Drug Strategy (2010) that encouraged competitive tendering, there has been an increase in voluntary sector organisations providing these services. In addition to this, following the Localism Act (2011), local authorities have been responsible for commissioning drug and alcohol services and receive their funding through public health grant from Public Health England [46].

The changes mentioned above have amounted to an overall disinvestment in drug and alcohol services. Roscoe et al reported that between 2013/2014 to 2018/19, £212.2 million was disinvested [46]. This is a 27% decrease in funding, albeit less than 1% was disinvested from alcohol treatment [46]. Whilst disinvestment was perceived as contributing to fewer people accessing drug and alcohol services, it was not found to be related to increases in alcohol-specific hospital admissions or mortality [46].

Miscellaneous Issues

There is no strong evidence that alcohol causes premature ageing, but there are some suggestions regarding alcohol's role in creating signs of ageing. For example, American Academy of Dermatology Association has highlighted environmental and lifestyle choices e.g., consumption of alcohol, as contributors to premature aging of skin [18]. A study between 1976-2003 discovered that women who drank 28 or more alcoholic beverages per week were 33% more likely to develop arcus senilis, a grey or white arc above or below the outer part of the cornea; and

35% of men who consumed more than 35 drinks per week developed the condition [47]. Other evidence of alcohol-related signs of aging is anecdotal and includes narratives of alcohol leading to wrinkles and inflammation.

The elderly are at increased risk of dehydration because the sense of thirst diminishes, renal function declines, and the balance of water and sodium in the body changes [44]. One study found that approximately 38% of its 30,000 participants were dehydrated, and another discovered that 4 in 10 older adults admitted to hospitals showed signs of dehydration [45]. Compounding these problems is the fact that alcohol can result in frequent urination, which can lead to dehydration [44].

Drinking alcohol compounds the risk of driving at older ages, because it impacts reaction time, coordination, eye movement, and information processing abilities [48]. One study in 2012, found that 21% of the drivers involved in fatal car crashes had a blood alcohol concentration (BAC) of 0.08 or higher; 14% of those drivers were aged 65 or older [49].

Several self-report questionnaires have been designed for detecting AUD, which include the Short Michigan Alcoholism Screening Test–Geriatric Version [50] and the Alcohol Use Disorders Identification Test (AUDIT) [51]. AUDIT and its short-form AUDIT-C [52] are also useful tools for screening for harmful and hazardous drinking in elderly patients. AUDIT has superior validation cross-culturally but less evaluation in the elderly age group. CAGE is widely used in clinical settings – it comprises 4 items that ask about cutting down, annoyance at criticism, guilty feelings, and the use of eye-openers [53]. It does not have high validity with older adults, especially with older women. It is limited as it assesses lifetime alcohol use and does not enquire about current drinking habits. In a large study involving more than 5000 consecutive primary care patients aged 60 and older, the CAGE identified fewer than 50% of the heavy or binge drinkers. MAST–G has high specificity and sensitivity with older people in a wide range of settings, including primary care clinics and nursing homes [54].

There has not been much research within mental health services exploring the changes in drinking behaviour among older people during the COVID-19 pandemic. A few studies used AUDIT to identify risky drinking in the elderly in large samples. They found that compared with before lockdown, those who abused alcohol were more likely to be female, had less severe cognitive impairment, and showed morning-drinking and feelings of guilt over their drinking [55].

Conclusions

Alcohol consumption constitutes a substantial burden of disease and is being recognised as a major public health issue in the elderly. It is, therefore, important that the needs of this population are highlighted in national health service frameworks and strategies. There have been some efforts at the Department of Health and the Royal Colleges to address the issue through an overall increase in funding, more training posts, and a plan to bring drug and alcohol services back into psychiatric services. Let us see how long it takes for these changes to trickle down to meeting the needs of the elderly by overcoming wider issues of ageism and the reluctance of some specialist alcohol services to open their doors. There is an urgent need for UK-based research to help treatment services determine the exact extent of the problem and to develop effective screening methods and interventions to provide optimal care for this vulnerable, growing, and under-recognised group.

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Pride & Prejudice – Psychodynamics of Addiction

Adina Parkes

Despite addiction representing a significant ongoing public health concern, the literature on psychodynamics of addiction remains sparse compared to that of other psychiatric disorders. This is also reflected in the healthcare service design where professionals other than mental health services deal with drug & alcohol use disorders and their comorbidities, for example pain clinics who manage patients for whom opioid dependence started as part of pain management [1]. This practice influences the decision-making process of many mental health professionals as clinicians look at each problem separately when treating and signposting patients to each of these services.

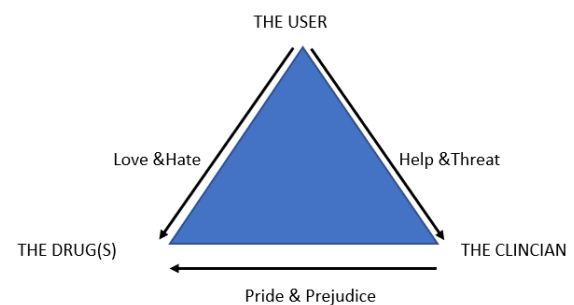
Violent behaviour and assaults on staff in healthcare settings including Accident and Emergency (A&E) and GP surgeries is a growing problem [2,3,4]. The relationship between such behaviour and illicit drug use is well established; intoxication may be described as reduced inhibitory response during stressful situations, over-reaction, negative thought pattern, reduced self-reflection, increasing concerns about personal power and underestimation of consequences [3]. Therefore, modification of relevant communication approaches could serve as a potential preventative measure, and an understanding of interpersonal dynamics in this context could add value to developing communication and management strategies that help reduce the risk of violence.

This review of some basic psychodynamic concepts is being carried out with a view to helping improve the understanding of addictive behaviour, associated clinical decision-making and communication approaches for clinicians working in different settings.

A classic triangle

Regardless of the setting, in every encounter with an individual drug addict you have three actors in play - the clinician, the user and the drug [5].

Before jumping into telling the user how damaging illicit drugs are, it is worth reflecting on this aspect to avoid conveying a counter-therapeutic interaction.



The Drug and the User

Whilst the effects of drugs are widely described, the literature on psychodynamics of drug use is sparse. This is surprising because the relationship between the individual and the drug is most often a long term one. Based on attachment theory [6], it seems drug users develop affectional bonds with their drug of choice. The word, “addiction” stems from the Latin *addictiōn-* (stem of *addictiō*) which means “a giving over, to surrender”, and “dependence” from the Latin *dēpendere*, which means “to hang down” both implying a surrender to the relationship with the drug. Moreover, if one searches the word “dependence” in *Dictionary.com*, it means a state of relying on someone for support, and an object of reliance or trust. Bowlby [6] suggests that we have an innate tendency to seek and maintain proximity to certain preferred others.

The story of Konrad Lorenz and the ducklings is common knowledge; whilst ducklings attach themselves to a mother figure through the process of imprinting, it is a distinct feature of human beings to cultivate attachment over time, creating different relationships with specific and distinct others so that attachment becomes a different component in a relationship than simply need-driven dependency [7].

In a secure attachment relationship four components are important:

1. The need for proximity and secure base when a child has a constant and reliable presence of an attachment figure during their development
2. Homeostasis where the couple will work towards protecting their relationship from external threats and maintain it unchanged
3. Internal working models when experiences with others become internally represented and form a template for future relationships. There is growing neurobiological evidence for how the early childhood experiences influence “the wiring of the brain” [8].
4. Capacity to mourn the loss by “moving on” and working through the loss is developed during secure attachment

Similarly, when we examine affectional bonds of the addicted person with the drugs of choice, there is clear evidence of a relationship and attachment beyond its chemical components. For example, a patient who engages with psychiatric treatment and maintained abstinence from oral and injectable illicit drugs prefers to receive antipsychotic treatment in the form of tablets as it maintains his life in a comforting routine. Such patients often decline injectable medication as just the act of being injected would bring back the cravings for opioids. So, on one hand they choose to maintain a positive attachment with prescribed medication relying on a previous familiar experience but also choose to avoid triggers e.g., needles that remind them of the destructive negative attachment to injectable drugs. They seek proximity to something familiar, knowing it is always there and they could turn to it for comfort. It is not dissimilar to how an infant turns to his mother in times of distress to seek re-assurance and comfort.

This is an ambivalent relationship – love but also hate. There are times when the person dependent on drugs feels disgusted with the habit, but shortly after the same person seeks new supplies as he struggles to find internal resources to deal with dependence.

The User and the Clinician

The relationship between the treating clinician and drug user is also an ambivalent one. The clinician’s intention to help might be obvious, but

what might be less obvious is that he or she will be perceived as a threat to the affectional bond with the drug based on homeostasis, as described above. This is illustrated by the denial and rationalization that many patients use as defence mechanisms when discussing negative effects of drugs. Despite the reason that has brought them to that clinical encounter and the evidence-based literature, some still insist on denying that the drug does them any harm, suggest alternative benefits or even go further to advocate that some illicit drugs should be legalized.

The Clinician and the Drug

The clinician perceives the person addicted to drugs as well as the dependence, and countertransference will shape that interaction due to unconscious internal forces. The clinician, with a profound desire to save the user from the drug, might take pride in his professional role, and unleash the fantasy of omnipotence. By embracing the role of an omnipotent saviour, he risks disillusionment when the user relapses or even dies as consequence of the drug habit. Some clinicians will find themselves becoming detached and thinking that they are becoming rational. They might give up hope that their efforts will bear fruit and feel helpless in the process. This is where the clinician is at risk of becoming judgemental and adopting a moral stance when seeing drug users. For example, “they do it to themselves” is not an uncommon phrase or thought amongst healthcare workers in emergency settings when faced with intoxicated patients. Different healthcare professionals will be on a continuum between these two extremes, and the same clinician can move along this continuum depending on the situation. Of course, this is only a somewhat simple example out of the multitude of complex emotions and dynamics which could occur between the clinician and drug user.

What is gained and what is lost?

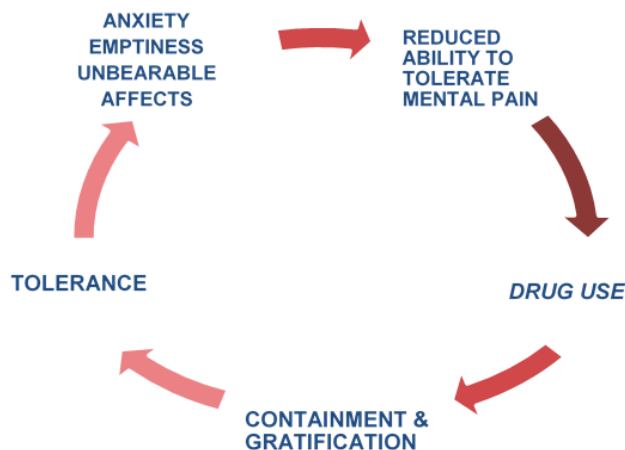
How and why does an attachment to one or more drugs take place, and what does the drug user get out of this relationship? The theoretical framework of “containment” might come into play here; the assumption being that we are not born with

the capacity to contain our own emotions. In the first “container” (child with his mother), the newborn experiences emotions e.g., fear, anger, hunger, as a threat (“the end of the world”), but the mother offers containment and soothing as a maternal function. If there are insufficiencies in the maternal function, the adult will develop various self-regulating deficits.

There is an overall understanding in the psychodynamic framework that people addicted to drugs are likely to suffer self-regulating deficits in affect, behaviour, and self-esteem which influence their relationships. They might be incapable of tolerating and regulating interpersonal closeness. The ingestion of a drug can be seen as a desperate attempt to compensate for these deficits.

Recent psychoanalytical thinking has tried to connect the understanding of drug addiction with recent developments [7,8]. Some suggest three forces contributing to addictive tendencies:

1. A difficulty in tolerating affect coupled or derived from reduced capacity to tolerate mental pain
2. The object constancy problem (meaning deficits in early development) which makes the person use drug as a soothing internal object, as a substitute for a containing soothing mother
3. The biological based craving



**Based on A. H. Williams, Container and Contained:
the school of Bion,
The Psychodynamics of Addiction 2002**

The drug is used as a search for a reliable container to contain the individual or their unbearable emotions. Drugs offer an immediate solution to the painful affect, whatever that is, and

therefore users frequently request medication to alleviate these painful affects. Treatment guidelines may appear disappointing to some of these patients as they do not support any quick fixes. This might also be the reason why many doctors feel under pressure to prescribe: “do something about it, now”. However, imagine someone with limited capacity to tolerate having discovered a “miraculous substance” which offers that relief. How can one think about the future and wait for it when they struggle in the present? We ask our patients to give up the drug, engage with substance misuse services and work hard in a long psychological treatment which might alleviate some of the pain– in the user’s perception this could be an uncertain future.

The problem with this solution is its temporary nature, as greater and greater amounts of the drug will be necessary to obtain the same effects and relief because the person will develop tolerance. Some drugs might be more containing than others, but they will weaken and destroy the ability to tolerate emotional pain, which the addicted person must endure no matter how fragile - the self becomes weaker by reducing exposure to pain. It is not dissimilar from avoidant behaviour in anxiety. Some propose that this cycle could lead to a *Pharmacotoxic crisis*. The exit from this crisis could have 3 potential consequences: flight into a drug free period – defence of a manic kind which will lead to collapse in subsequent states of anxiety; suicide; or psychotic breakdown.

Another theoretical framework is narcissism, where a similar vicious cycle derives from deficits in self-esteem, which the person addicted to drugs is trying to regulate. Kohut [5] believed that the drug functioned not as a substitute for a love object, but a replacement for a defect in psychological structure. When the person struggles with low self-esteem, worthlessness, poor ability to self-soothe, the drug becomes an alternative for dealing with life experiences by improving mood, self-esteem, and a sense of power or assertion. The problem with this solution is its ephemeral nature; as no internal reliable structures are built, the defect in self remains. This short-lived gain of a manufactured sense of power and importance disappears along with the chemical effects of drugs.

The spiral of addiction is described by some as a self-defeating process. The person finds himself in a

worse situation than before as their feelings of guilt and shame might add to the internal burden of that deficit [9]. They realize that they have not managed to solve the original problem, so the self-confidence gets hit. They must resort again and again to the same chemical temporary solution. Based on this framework, one can better understand the scenario in healthcare settings like A&E where patients may have sought to become intoxicated because they struggle with low confidence [7]. As a healthcare professional by default holds a position of authority, these patients could interpret such interactions as being “told off”, causing further injury to an already very fragile self-esteem. In this situation, with inhibitory responses already compromised, the patient will react in an aggressive manner. Understanding these psychodynamics can allow professionals to adopt useful communication approaches in such interactions.

The Broader Picture

It needs to be mentioned that some of the complex emotions and scenarios discussed above will be replicated at organizational and societal level [5]. There is evidence that teams working with drug users and treating drug addiction need regular supervision to address the dynamic difficulties inevitably arising in their work. At organizational level, these difficulties become more evident at multiple interfaces when different services deal with different aspects of an individual’s difficulties. A patient who already has a milieu of inconsistent patterns of attachment in their internal world will unconsciously replicate patterns of interaction with the clinicians involved in their care by various defence mechanisms including projection and projective identification.

Society itself seems to remain ambivalent at multiple levels in relation to the drug addiction. There are countries where drug use and/or intent to supply are criminalized, and in other countries these are decriminalized. The modern western society seems to be able to “demonize and glamorize” drug use at the same time where it attaches moral stigma to the drug addiction and individuals struggling with it, but it can equally harbour fascination and adulation as seen in the catwalk fashion of the 90s with the “heroin look”. Therefore, the overall picture and its dynamics are complex at individual, organizational and societal level.

The psychodynamic literature in this area also remains somewhat limited with a huge scope for exploration with support from public health resources.

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Cannabis and Psychosis – Cause and Cure

Rhian Bradley & Verity Williams

Abstract

Professionals working in mental health services frequently see individuals who have comorbid substance misuse. The relationship between mental health and substance use is complex, particularly for cannabis, which remains the most prevalent illicit substance used globally. Professionals are often asked questions regarding the role of cannabis as a causative factor in psychotic illness. As cannabis-derived products become more widely available, questions are also being asked regarding its role as a treatment for psychosis. This paper discusses the evidence for cannabis as an etiological factor in psychotic disorders, and the potential that cannabis-derived products, namely cannabidiol, have in treating psychosis. We aim to provide evidence for discussion with patients and their carers about this complex field.

Introduction

Cannabis is the most widely used illicit substance globally, and its use is increasing. In the UK, 40% of 15–16-year-olds have used cannabis [1], and the age at first use has been steadily decreasing [2]. The Crime Survey for England and Wales (2020) found that 18.7% of UK young adults (aged 16-24) had used cannabis within the last year [3]. This may be understood in the context of the ‘prevalent view of its harmlessness’ [4], the legalisation of use of cannabis in some jurisdictions (e.g., multiple states in the USA), and with cannabis-derived products, such as the non-psychoactive component cannabidiol (CBD) being widely marketed [5].

The three main types of street cannabis are derived from differing parts of the cannabis plant: ‘hash’ is made from the plants’ resin and the most prevalent type on the market up to 2000; herbal cannabis, also known as ‘weed’, ‘grass’ or ‘marijuana’, is made from the dried leaves and flowers of the pollinated plant; high-potency cannabis or ‘skunk’ is made from the unpollinated

plant. These types vary in the content of the psychoactive cannabinoid tetrahydrocannabinol (THC) [6]. ‘Hash’ contains 2-4% of both THC and CBD; herbal cannabis contains 2-4% THC and less than 1.5% CBD; and ‘skunk’ contains 12-18% THC and less than 1.5% CBD [7,8]. ‘Skunk’ now accounts for 70% of the street market; the potency of street cannabis has increased over recent decades, containing three times more THC than in the 1960s [4].

Cannabis use is prevalent in people with mental illness compared with the general population. Estimates of its use in people with severe mental illness within the UK vary from 20-70% [9,10]. Adults with mental illness used more than twice as much cannabis in the last year compared to adults without [11,12]. Reasons reported by people with mental illness for using cannabis include: to reduce boredom and to enjoy the positive mood; to get relief from dysphoria, agitation, and poor sleep; and to manage symptoms of mental illness [13].

Does cannabis cause or worsen psychosis?

Research dating from the late 1980s highlighted that the relative risk of schizophrenia among high consumers of cannabis (use on more than fifty occasions) was six times higher than non-users (95% CI 4.0–8.9) [14]. Arseneault (2002) conducted a population-based longitudinal study in New Zealand, collecting data on prodromal symptoms at age 11, and drug use at age 15 and 18. Those that had used cannabis by the age of 15 were four times more likely to develop a schizophreniform disorder at age 26 than controls [15].

Diverse evidence has since confirmed an association between cannabis use and psychosis. Semple (2005) investigated the association between preceding cannabis use and schizophrenia or schizophrenia-like psychosis, and found that individuals who used cannabis during

adolescence, had baseline psychotic symptoms, or were at high genetic risk, were particularly vulnerable [16].

Further studies have since added to the evidence of an association between cannabis use and psychosis. Barnett et al (2007) examined substance misuse in an 'Early Intervention in Psychosis' service in the UK [17]. He found that the lifetime prevalence of cannabis use in patients was 83%, with 51% meeting the criteria for cannabis abuse or dependence. The prevalence of cannabis use in the previous 30 days was higher than age-adjusted use for the general population: 29% of patients compared with 12%. The onset of substance use usually took place several years prior to the first psychotic symptoms [17]. Similarly, a longitudinal study of patients within a Canadian 'early psychosis programme' identified that 33% of patients met the criteria for cannabis substance misuse disorder [18].

Di Forti et al (2009) compared patients experiencing first episode psychosis with controls from the local UK population [19]. Whilst no significant association was found between individuals having 'ever taken' cannabis and psychosis, patients were more likely to be current daily users and to have smoked cannabis for more than 5 years compared to the controls. Among those who had used cannabis, 78% of patients used high-potency cannabis compared to 37% of the controls [19].

A Finnish population-based longitudinal study gathered information on prodromal psychotic symptoms and cannabis use at age 15–16 years [20]. Cannabis users received higher rates of psychotic diagnosis during the 15-year follow-up, compared to non-cannabis users (4.8% vs 1.7%). There was a dose–response effect with elevated risk in individuals who had tried cannabis more than five times (HR 6.5, 95% CI 3.0–13.9) [20].

There is also evidence that cannabis use worsens the prognosis of established psychotic illness. Individuals with first episode psychosis who persist in using cannabis have higher levels of positive psychotic symptoms [18]. Preceding use of cannabis in patients admitted to a 'psychiatric intensive care unit' is associated with more severe illness, requiring longer periods in hospital than non-users [10]. Cannabis also leads to increased

behavioural disturbances such as violence [9]. A recent review found converging lines of evidence indicating that patients with existing psychosis, or those at high risk of developing psychosis, are at increased risk of harm from using THC-containing compounds [21].

Is the association causative?

The nature of the association between cannabis and psychotic illness has been widely debated. Some contend that it is due to being a confounding factor; an independent factor which is associated with both the exposure to cannabis and the outcome of psychosis, but which does not lie on the causative pathway [22]. However, several studies had controlled for a wide range of potential confounding factors [23].

Others support the 'self-medication hypothesis', or reverse causality, and highlight the subjective view that cannabis use is secondary to mental health symptoms, either as a coping strategy or to alleviate side effects from prescribed psychotropics. This has not been supported by research, as studies adjusting for prodromal symptoms have shown clear evidence of a temporal relationship with cannabis use predating psychosis [15,17,20]. As intravenous THC induces positive psychotic symptoms in patients with schizophrenia [24] and controls [25] the biological plausibility of the mechanism by which cannabis use would ameliorate these symptoms lacks credibility.

A further hypothesis regarding this association is of 'effect modification', a phenomenon where an exposure has a different effect among different subgroups. Research supports this with cannabis being particularly linked with psychosis in vulnerable subgroups, such as individuals with prodromal symptoms, family history of psychosis [20], and those with certain genetic variants of the dopamine regulating catechol-O-methyltransferase (COMT) gene [26].

Could cannabinoids alleviate psychosis?

Dopamine antagonists remain the mainstay of treatment for psychotic illness. However,

treatment resistance, lack of efficacy for negative symptoms and adverse effects contributing to non-adherence are barriers to the treatment. Novel interventions that act outside of the dopaminergic system are thus needed, and CBD is seen as a possible candidate. CBD has opposite effects to THC on striatal brain activation, and pre-treatment with CBD attenuates THC induced psychotic symptoms [27].

The first single case study investigating the effects of CBD monotherapy, titrated up to 1500 mg/day, for a patient suffering acute exacerbation of schizophrenia, resulted in reduction of psychotic symptoms [28]. However, the subsequent case series examining the effects of CBD monotherapy, titrated up to 1280 mg/day, found improvements in only one of three patients with treatment-resistant schizophrenia [29].

One of the first landmark randomised controlled trials [30] compared up to 800 mg/day of CBD with the antipsychotic Amisulpride as treatment for patients with an acute exacerbation of schizophrenia. There was a significant and comparable reduction in positive symptoms in both groups [30].

CBD has also been investigated as an adjunct treatment. A randomised controlled trial in patients with schizophrenia, comparing CBD (1000 mg/day) as an add-on treatment to existing antipsychotic with add-on placebo, found a significant reduction in positive symptoms with CBD [31]. However, a second study using similar methodology, with a lower dose of 600 mg/day add-on CBD versus add-on placebo, failed to replicate these findings [32].

While CBD has been found to be well tolerated in short-term clinical trials [29, 30, 31, 32], the total volume of data regarding adverse effects is too small to conclude it as a safe treatment. Research on CBD, for indications other than psychosis, also suggest it has a favourable safety profile with no adverse effects on physiological, psychomotor or psychological functions [33,34]. However, CBD is not entirely free from adverse effects such as diarrhea, nausea and headaches [31], and in vitro work suggesting possible impact on cell viability and fertilisation potential [35]. CBD is also associated with significantly increased hepatic aminotransferases [36], and its potent inhibitory effect on the cytochrome P450 family (CYP3A4 and

CYP2D6) indicates it may affect circulating concentrations of concomitant psychotropics [37].

Discussion

Mental health professionals are frequently asked difficult questions regarding the role of cannabis as a causative factor in psychotic illness. Additionally, in the context of increasing use of off licence medical cannabinoids, questions are also asked regarding its role as treatment for psychosis. Woo (2002) makes the case for 'more transparency and humility' by clinicians when counselling patients, acknowledging that 'our current knowledge of cannabinoids is quite limited' within an 'evolving' evidence base [38].

We can advise with relative confidence that whilst most people who use cannabis do not develop psychosis, there is convincing evidence that individuals who use cannabis regularly from an early age and use high potency cannabis are at increased risk of developing psychosis. The risk is especially seen in those individuals with vulnerabilities such as prodromal symptoms or a family history of psychosis. There is also evidence that the outcomes for patients with established psychotic illness are worse when cannabis use is ongoing.

We can let our patients know that, at this time, there is only limited evidence regarding cannabinoids' efficacy in treating psychotic illness. There is also insufficient data to make conclusions regarding its long-term safety. In addition, off licence medical cannabinoids carry risks as they are unregulated, not of pharmaceutical quality, with high risk of contamination with other cannabinoids [39]. The dosage of cannabidiol products is also highly variable and typically lower than doses used in clinical studies. Off licence medical cannabinoids are thus 'at best an expensive placebo, but at worst may be actively harmful' [39]. We must also acknowledge that research in this area is ongoing and the advice may change in future.

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The vicious circle: the case for decriminalisation of illicit drugs

Ben Harman-Jones

With regards to drug policymaking, the views of governments and the populations they influence have become increasingly hard-line and regressive over several decades. In this article, I argue that a toxic escalation in the way society views drugs and those who take them is fuelling a vicious circle of violence and harm.

Much of the early story of the “War on Drugs” is concentrated in the US, with other countries following their lead. In 1971, Richard Nixon declared drug abuse to be a “public enemy number one”, drawing on new legislation that greatly expanded state controls of various classes of drugs. The UK quickly followed with the Misuse of Drugs Act 1971, which transformed the UK from a relatively liberal into an authoritarian state, making the possession and supply of many classes of drugs a criminal offence. Ostensibly, the goals of prohibition were to protect the public, but many have instead described the War on Drugs as a political ruse to manipulate popular opinion. One only has to look at America’s major foreign policy issue of the time, the Vietnam War, and the left-leaning hippies and black communities who were disproportionately targeted, in order to appreciate this. The association of these groups with cannabis and heroin use was politically expedient for the administration of the time. In the 1980s, Ronald Reagan greatly expanded the War’s scope, with far-reaching and devastating consequences. This policymaking agenda has come at an enormous financial expense, with an estimated cost to the US exceeding \$1 trillion, and continuing to cost over \$50 billion annually [1].

The premise behind the War is that drug prohibition will decrease drug use, which will in turn reduce drug-related harm. Unfortunately, the links in this chain of causation do not withstand scrutiny. Despite the huge financial cost of the War so far, there is no sign that drug use has decreased. The Crime Survey for England and Wales for the year ending March 2020, showed that 35% of 16 to

59-year-old adults reported using a drug in their lifetime [2]. The survey noted that 9.4% had used a drug within the last year, which represents an 8.6% increase from the year ending March 2010 [2]. Drug-related harm has also only worsened since the War began. Perhaps most strikingly, deaths from drug overdose in the US have risen sharply, from less than 3 in 100,000 in 1980 to approximately 12 in 100,000 in 2008 [1]. Since 2010, the US has seen a terrifying escalation in the numbers of opioid-related deaths from overdose [3], with Fentanyl being the most common cause since 2013 [4].

The obligation of government to protect the public is often-referenced as a rationale for prohibition, referring to the almost universal view that all drugs are inherently dangerous. However, this position is not supported by the available evidence. In the late 2000s, Professor David Nutt, then Chairman of the UK’s Advisory Council on the Misuse of Drugs (ACMD) famously ‘poked the proverbial hornets’ nest’ with a series of damning publications which were critical of the UK government’s drug policies. Famously, in 2010, he published a paper in the *Lancet*, “Drug harms in the UK: A multicriteria decision analysis” [5] which detailed the findings of an expert panel on the relative harms of various legal and illegal drugs. In this analysis, several commonly used recreational drugs such as LSD and ecstasy were rated as far less harmful than others, including the legal drug alcohol.

This evidence stands in contrast to the often reductionist and dichotomous way in which drugs are represented by the mainstream media. In the 1980’s, Nancy Reagan’s oversimplified “Just Say No” campaign categorised all drugs under the same umbrella and promoted the frankly absurd idea that drug users merely had to make a moral choice to abstain. Closer to home, a similarly reductionist approach was taken by the campaign following the ecstasy-related death of Leah Betts in 1997. Whilst her death was of course tragic, the overly simplistic

manner in which the individual circumstances affecting her were extrapolated to an entire population provoked an unjustified moral panic. In reality, the issue of drug-related harm is highly complex, and while it is true that some drugs can cause real harm to the individual and to society, this is invariably within the context of interacting biological, psychological and social factors. Treating the drug use in isolation completely misses the mark.

In this environment, discrimination towards those who use drugs will continue. Overly simplistic stereotypes percolate the public consciousness, and lead to societal division and a poor understanding of the underlying reasons why individuals use drugs. The overwhelming weight of research evidence tells us that those who use drugs frequently have a history of adverse childhood experiences and emotional dysregulation. This has been demonstrated across a range of substances [6, 7, 8, 9, 10]. If we fail to respect those who use drugs as individuals, and the true complexity of the situation, there will be little progress.

It is also important to consider the role of the criminal justice system. The very act of prohibiting drugs means that all drug-related activity is driven underground, handing a 'golden' financial opportunity to criminals. The UK drug market is estimated to be worth in excess of £9 billion a year [11]. With such a sizeable black-market economy, inevitably significant levels of violence are associated with drug-related crime. Dame Carol Black's independent review concluded that the widespread involvement of children and young people in the drug market was likely to be driving the increase in violence and homicides in young people, with the homicide rate among victims aged 16 to 24 almost doubling between 2015/16 and 2017/18 [11].

It is clear from available evidence that the criminalised prohibition of drugs is not only ineffective in reducing drug use and drug-related harm, but also actively stimulates high levels of violent drug crime which often affects the most vulnerable in society. In addition, reductionist media reporting entrenches stigmatisation of individuals that use drugs which results in regressive and intolerant policymaking. There is however growing evidence that progressive drug

policymaking can be an effective strategy to break this vicious circle of ever-worsening outcomes.

To date, around 40 countries have taken the progressive step to decriminalise some degree of drug use or possession. Portugal serves as an example of the positive effects this can bring. In the 1990s Portugal was being ravaged by an opiate overdose crisis, with a staggering 1% of the population addicted to opiates at the worst point [12]. In 2001, the Portuguese government took the almost unprecedented step of decriminalising all drug possession, which meant no custodial sentences and no criminal records for possession. Cases were dealt with administratively rather than criminally, with drug users being assessed on a case-by-case basis with a range of harm-reduction interventions available. The success of this approach has been overwhelming, with a dramatic reduction in drug deaths within the first five years [12]. There has been no increase in drug use, and there has been a decrease in drug-related harm [12]. Strikingly, the number of new HIV diagnoses has fallen from 1287 in 2001, to just 16 in 2019 [12].

With such overwhelming evidence to support progressive drug policymaking, the continued and damaging insistence of the UK government to tackle drug-related harm through the criminal justice route is unjustifiable. Alternative approaches can be successful, as shown in Portugal, and a number of other countries are following their lead. The UK cannot hope to move towards a healthier and more understanding society whilst this regressive approach remains in place, and thus wholesale change is desperately required.

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Effectiveness of Crisis Resolution and Home Treat Team

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Introduction

The Crisis Resolution and Home Treatment Team (CRHTT) is a 24/7 service available to provide assessment and treatment to people experiencing an acute psychiatric disorder, and to support their carers. The purpose of CRHTT is to provide care for mental health crises using the least restrictive option and a biopsychosocial approach. The service is open to referrals from patients and their carers, as well as other psychiatric services including Liaison, Community and Inpatient teams. CRHTT is run by a multi-disciplinary team, which consists of psychiatrists, nurses, occupational therapists, support workers and admin staff.

CRHTT offers a range of interventions, including gatekeeping assessments at which patients are assessed regarding whether they can be managed at home or a hospital admission is required. In addition, short-term interventions for patients in acute crisis to prevent relapse, monitor their mental state, assess risk, and support with medication compliance are provided.

The impact of CRHTT, including prevention of hospital admissions, is an area of much deliberation. Findings from a systematic review by Wheeler et al [1] suggested that a team psychiatrist may increase the team's ability to prevent hospital admission. A recent study by Stulz et al [2], carried out in Switzerland, explored the degree to which home treatment services would enable a reduction in hospital use as compared to 'treatment as usual' with a conventional system where there was no home treatment provision. They found a 30% reduction in hospital days within 24 months of their index crisis when a home treatment team was available [2].

The NHS Long Term Plan [3] sets out an ambition that Crisis services in each area are fully resourced for 24/7 care, are open to referrals from

individuals as well as other services, improve outcome & patient-experience data, and offer home treatment as an alternative to inpatient admission.

We carried out a survey of the care provided by a CRHTT in South East England by reviewing interventions offered by its psychiatrists to ascertain whether inpatient admissions were prevented by the CRHTT involvement.

Methods

We examined the clinical records of 100 consecutive patients who had received care from the CRHTT starting on 26th May 2021. We obtained demographic data including age, sex and ethnicity as well as the background to each patient's referral to CRHTT which included: referral source; referral reason; discharge from the CRHTT within the previous two months; whether there was an existing diagnosis and/or whether the patient received an assessment by a CRHTT psychiatrist.

We also collected data on the interventions that were provided to patients including: psychiatric formulation and diagnosis; initiation of psychotropic medication; alteration of existing psychotropic medication and initiation of a benzodiazepine.

The primary outcome was to detect whether a hospital admission was prevented by the involvement of CRHTT. This was determined by whether the patient was admitted during their time with the CRHTT, or if they were admitted within 2 months of their involvement with CRHTT. We used the "CCQI Home Treatment Accreditation Scheme – Standards for home treatment and Crisis Resolution Team, Fourth Edition" as a reference to derive the standards for the survey [4].

Ethics approval was sought and granted by the local ethics committee.

Results

In our sample (n=100), the majority (91%) of patients were aged 25-64 years old, with a mean age of 42.3 years. A significant majority (79%) of the sample described their ethnicity as White followed by Asian (6%) and Black Afro-Caribbean (5%).

Table 1 shows the sources and reasons for referral. The most frequent source of referral was self-referral (29%). Among services, liaison psychiatry was the most frequent source of referrals (19%). Referrals from wards and the community made up 13% and 12% of the referral sources respectively. Of these 100 referrals, 58% were accepted by the CRHTT for intervention.

Table 1: Sources and reasons for referral

Referral source	
Self	29%
Liaison	19%
Other	17%
Ward	13%
Community Team	12%
Family	8%
Carer	2%

Referral reason		
	Primary	Secondary
Monitor Mental state	49%	29%
Risk management	29%	36%
Medication Compliance	12%	21%
Mental state relapse	5%	14%
Gatekeeping	5%	-

Among primary reasons for referral, monitoring of mental state was by far the most common, constituting approximately half of the referrals. Risk management was the next frequent reason (30%), followed by monitoring medication compliance (12%), relapse (5%) and gatekeeping (5%).

The majority (83%) of the sample had not been under the care of the CRHTT in the previous two months. The primary and secondary diagnoses are shown in **Table 2**.

Table 2: Diagnosis of Crisis Team Referrals at time of acceptance to CRHTT

Diagnosis	Primary	Secondary
F00-09 - Mental disorders due to known physiological conditions	2%	-
F10-19 - Mental and behavioural disorders due to psychoactive substance use	5%	2%
F20-29 - Schizophrenia, schizotypal, delusional, and other non-mood psychotic disorders	25%	3%
F30-39 - Mood [affective] disorders	30%	9%
F40-49 - Anxiety, dissociative, stress-related, somatoform and other nonpsychotic mental disorders	4%	3%
F60-69 - Disorders of adult personality and behaviour	33%	8%
F70-79 - Intellectual disabilities	1%	4%
No diagnosis	(Primary) 17%	(Secondary)71%

Regarding the outcomes measured, as shown in **Table 3**, 32% of the patients referred were assessed by a psychiatrist - 50% were initiated on a new medication, 25% had an existing medication altered, and 9% were initiated on a benzodiazepine. A new/additional diagnosis was given to 44% of patients, and 75% of the patients received a

working diagnosis. 19% of the sample received a formulation (Table 3a).

Admission was considered to be prevented in 85% of the sample as these cases were not admitted to an inpatient bed within one month of their discharge from the CRHTT (Table 3b)

Table 3: Outcomes

a. Interventions by the Crisis Team Doctors

Outcome	Yes	No	Total number receiving psychiatric assessment by Crisis Team Doctor n=32
Initiate new medication	16 (50%)	16 (50%)	
Initiate benzodiazepines	3 (9%)	29 (91%)	
Alter existing medication	8 (25%)	24 (75%)	
Formal diagnosis given	14 (44%)	18 (56%)	
Working diagnosis given	24 (75%)	8 (25%)	
Formulation given	6 (19%)	26 (81%)	

b. Prevention of inpatient psychiatric admission

Outcome	Yes	No	Total number accepted by the CRHTT caseload n=83
Did we prevent a psychiatric admission during their involvement with the crisis team?	47 (85%)	8 (15%)	
Were they admitted to an inpatient psychiatric ward within one month of referral to CRHTT?	8 (15%)	47 (85%)	

Discussion

We have fulfilled the primary aim of this survey - to assess the effectiveness of the CRHTT interventions in preventing admissions to inpatient psychiatric wards. Our key findings in that respect were that admissions were being prevented in most cases, and patients were not being re-admitted within 1 month of their discharge from the team. These findings support the notion that presence of a CRHTT is effective in prevention of hospital admissions and are in line with the results from other studies [2].

We found that this CRHTT is a 24/7 service, which is open to referrals from individuals and families, to be cared for at home instead of the

hospital where appropriate, and there are no restrictions to access for older adults. Our findings also meet the expectations of the 2019 Long Term Plan [3] where a comprehensive crisis pathway is sought in every area for accessing crisis care by individuals, communities, and other medical services. Furthermore, our study contributes to the national data for monitoring activity in crisis services, for improvement in the required outcomes and patient experiences and to understand the quality of care that is being provided.

This is the second survey carried out in this CRHTT in the last five years [5], which highlights the outcomes related to the work of psychiatrists in such teams. Their presence and involvement

appear to be pertinent and global, across all aspects of psychiatric care, including diagnosis, formulation, and medication management. Where patients' existing medication regimens were unaltered, a significant number of patients received diagnostic or formulation input. Heavier involvement in the management of patients previously unknown to mental health services was also detected. The significance of psychiatrists in providing formulation might be particularly important given the multidisciplinary nature of the CRHTT, as a way of directing and structuring the provision of allied services and interventions.

Our study has limitations including lack of controls, small size of the sample and a single site. Another limitation could be the arbitrary period of 1-month for follow up to check whether patients were re-admitted. We had picked this period as it reflects the maximum time most of the patients stay with this team. Longer periods of follow up may allow more insight into average lengths of time before hospital re-admissions take place and the reasons for readmission. Finally, due to limited resources, our study did not focus on the valuable interventions provided by the non-medical staff and their contribution to preventing admissions. In the light of the above, our study adds the body of knowledge on this important subject, but our findings are unlikely to be generalised to the wider population or to other catchment areas.

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