A whole systems approach to delivering evidence based substance misuse interventions in Forensic Services.

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WORKING AT RETIRED

Context of presentation

29 years of delivering substance misuse interventions.

Specialist training and academic development to Doctorate level over the same time frame.

Facilitated in excess of 30 substance misuse treatment programmes (the majority of which averaged fourteen-fifteen months duration).

Development and supervision of substance misuse teams across high, medium and low secure services within Nottinghamshire Healthcare NHS Trust.

Provision of training and supervision of substance misuse interventions in associated medium secure forensic services and Whitemoor prison.

Development and delivery of two multi-professional substance misuse courses over a twenty year period.

Development of evidence based gender specific manualised substance misuse programmes.

So what about the evidence.

Studies have consistently evidenced high rates of comorbid substance misuse problems in men with severe mental health / personality disorders detained in forensic services (Bloye et al, 2003; D'Silva & Ferriter, 2003).

Fazel et al (2009) in a systematic review of twenty studies found that comorbid substance misuse with a schizophrenia diagnosis increased the risk factor of violence by up to twenty five times.

Duggan (2008) argues that the increased risk of violence associated with a personality disorder diagnosis is largely explained by comorbid substance misuse.

More importantly, continued substance misuse upon release has been consistently demonstrated to be predictive of violent recidivistic offending (Maden et al, 2006; Putkonen et al, 2004; Reyes et al, 2009).

However, the evidence highlighting the risk of recidivistic violence associated with a relapse into substance misuse is not new (Norris 1984).

Forensic services

Forensic services rarely provide effective assessment and interventions for alcohol and drug misuse in individuals with comorbid mental disorder problems (Scott et al., 2004; D'Silva & Ferriter, 2003).

Durand et al (2006) in a survey of 28 medium secure units in England (97% response rate) found that every unit had experienced problems with alcohol and illicit drugs in the previous year.

Furthermore, while half of the units offered some form of substance misuse intervention the majority of the programmes were overly brief, poorly structured, lacked an evidence base and delivered by staff with little or no specialist knowledge of the subject matter.

D'Silva & Ferriter (2003) argue that one reason why clinicians working in forensic services give low priority to substance misuse is simply because they have little or no knowledge and experience of working with these issues.

Clinical posts associated with the delivery of treatment interventions have been significantly reduced and suffered disproportionately in the cutbacks that have occurred over the last five years.

Dispelling the myths

Random urine testing does not reduce drug consumption in patients detained in forensic services.

Clinicians advising patients they must not drink or use drugs when they move back into the community does not mean that they will be able to sustain such behaviour following discharge.

Likewise, education on the harmful effects of alcohol and drugs does not motivate patients to pursue an abstinence goal when back in the community.

Increasing the number of managers and security posts within forensic settings has no impact on the level of recidivistic offending in discharged patients.

Community drug and alcohol services are not best placed to work with patients from forensic services.

Clinical posts for substance misuse are not a luxury but should be viewed as an essential part of clinical services.

The reality is

The prevalence and types of substance misuse among patients detained in forensic services has increased significantly in recent years (D'Silva & Ferriter, 2003; Scott et al., 2004; Thomas, 2011).

Significant numbers of individuals with psychiatric problems are as a result of their substance misuse and violent behaviour being diverted into the prison system rather than psychiatric services.

We therefore need to be mindful that there is a considerable overlap between patients detained in forensic services and the wider prison population.

Some evidence to suggest that staff working in forensic services drink more alcohol and use more drugs than the patients they care for.

Secure environments – dry house?

Even the most secure care environments have major problems with one or more forms of addictive behaviours.

Evidence suggests that many mentally disordered individuals use substances not just for enjoyment but also as a means with coping with a variety of personal and life experiences. In addition, they use them to cope with the symptoms of their mental disorder and the effects of the medication they take.

Many clinicians believe that because patients are often unable to access alcohol and drugs in hospital that a natural extinction process occurs whereby the individual's substance problems disappear.

Likewise, many clinician's argue that substance misuse problems should be treated in the community or as close to it as possible. However, how do you assess potential risk factors and address them if such an approach is employed!

Welcome to parallel behaviours

Tobacco used as spliffs

Excessive consumption of caffeine and high-energy drinks

Excessive consumption of pop, sweets, chocolate, binge eating.

Excessive and ritualistic physical exercise.

Excessive consumption of water.

Excessive computer gaming.

Abuse of prescription medication including antipsychotics, analgesia (especially opioid analgesics), anti-inflammatories and anticholinergics.

The later is unfortunate as it places the RC (Responsible Clinician) in the role of the local drug dealer.

For further info see Thomas & Hodge (2010). Substance paralleling behaviours in detained offenders. In Offence Paralleling Behaviour. Daffern, Jones & Shine. Wiley Blackwell.

Need to remember

The majority of individuals who present to forensic services have a complex presentation where substance misuse problems are symbiotic with a number of mental health and personality related problems.

Moreover, these relationships between an individual's mental health and personality problems are such that any one of these may trigger substance misuse behaviour.

Consequently, if we want to be effective in helping patients address their substance misuse problems then we need to be considerate of these relationships. Failure to do so is simply setting someone up to fail.

In addition, we need to remember that the relationship between a patients substance misuse and their violent behaviour is not a linear relationship but one affected by a range of interpersonal and intrapersonal variables.

So what does the literature tell us about men with a mental disorder who misuse substances?

Substance misuse - violence

Clear evidence of a relationship between substance use and violent behaviour (Boles & Miotto, 2003; Hoken & Stewart, 2003).

Commonly associated with intoxication and binge pattern of use for alcohol and stimulants Chermack & Blow, 2002; Wright & Klee, 2001; Friedman 1998).

Heavy intoxication and withdrawal states for cannabis (Moore & Stuart, 2005; Niveau & Dang, 2003).

With cannabis, paranoia and anxiety symptoms frequently dose related (Beautrais et al., 1999; Johns, 2001; Klee et al., 1998).

Substance use may trigger specific emotional states, such as anger, shame and guilt (Parrot et al., 2003).

Possible evidence of a link between cannabis use and sexual violence.

Violence – substance misuse

Some evidence to suggest that use of certain substances reduce levels of violence amongst violent populations (Vincent et al., 1999; Khantzian, 1997).

However, as tolerance grows, levels of substance use likely to rise to a point where it triggers rather than inhibits violence (Moore & Stuart, 2005).

Argued that in some instances the use of substances is as a direct result of individuals trying to reduce feelings of anger and aggression (Khantzian, 1985).

Substance misuse – mental health symptoms

Certain types of substance use can replicate psychotic symptoms and episodes; in particular symptoms of paranoia and anxiety (Curran et al., 2004; Hoaken & Stewart, 2003; Johns, 2001.)

Increased risk of schizophrenia associated with heavy cannabis use in adolescent years (Arseneault et al., 2000).

Intoxication and withdrawal states strongly associated with mental health problems (Johns, 2001; Moore & Stuart, 2003).

Violence – mental disorder

Problems of violence common amongst juvenile offender populations who are later diagnosed with a mental disorder (Barthelemy et al., 2002; Hill, 2006; Johnson et al., 2000).

Similarly, many adult violent offender populations have a high prevalence of individuals who subsequently develop or are diagnosed with a mental disorder while in custodial services (Coid et al., 1993; Singleton et al., 1998; Lader et al., 2003).

Mental health symptoms - violence

Mentally disordered populations do present an elevated risk of violent behaviour. However, this risk is largely confined to those suffering from severe or long term psychotic symptoms and/ or certain personality disorders (Arseneault et al., 2000; Mitchell, 1999; Hodgins, 1995).

Underlying prevalence rates of co-morbid personality disorders (especially anti-social and borderline types) are high in individuals with mental health problems; especially in forensic services (Blackburn et al., 2003; DOH, 2003).

Selective processing of threat cues evident in mentally disordered populations (Marshall, 2002).

More evidence- mental disorder and violence

Evidence confirms that rates of violence amongst individuals with mental disorder problems are higher than non-mentally disordered populations (Pilgrim & Rogers, 2003; Arseneault, et al., 2000; Swanson, et al., 1996; Hodgins, 1995).

It is also recognised that because some mental disorders differ considerably in symptomatology they may present an increased risk of violence (Moran et al., 2003; Walsh et al., 2002).

Substance use in individuals with a comorbid mental disorder is strongly associated with increased levels of violence amongst this population (Wright et al., 2002; Soyka, 2000; Phillips, 2000; Barret & Slaughter, 1996).

PTSD as an additional variable for violence

Symptoms of PTSD induced by violent trauma shown to precede violence (Collins & Bailey, 1990).

Violent alcoholics distinguished from non-violent alcoholics by history of abuse (Kroll et al., 1985).

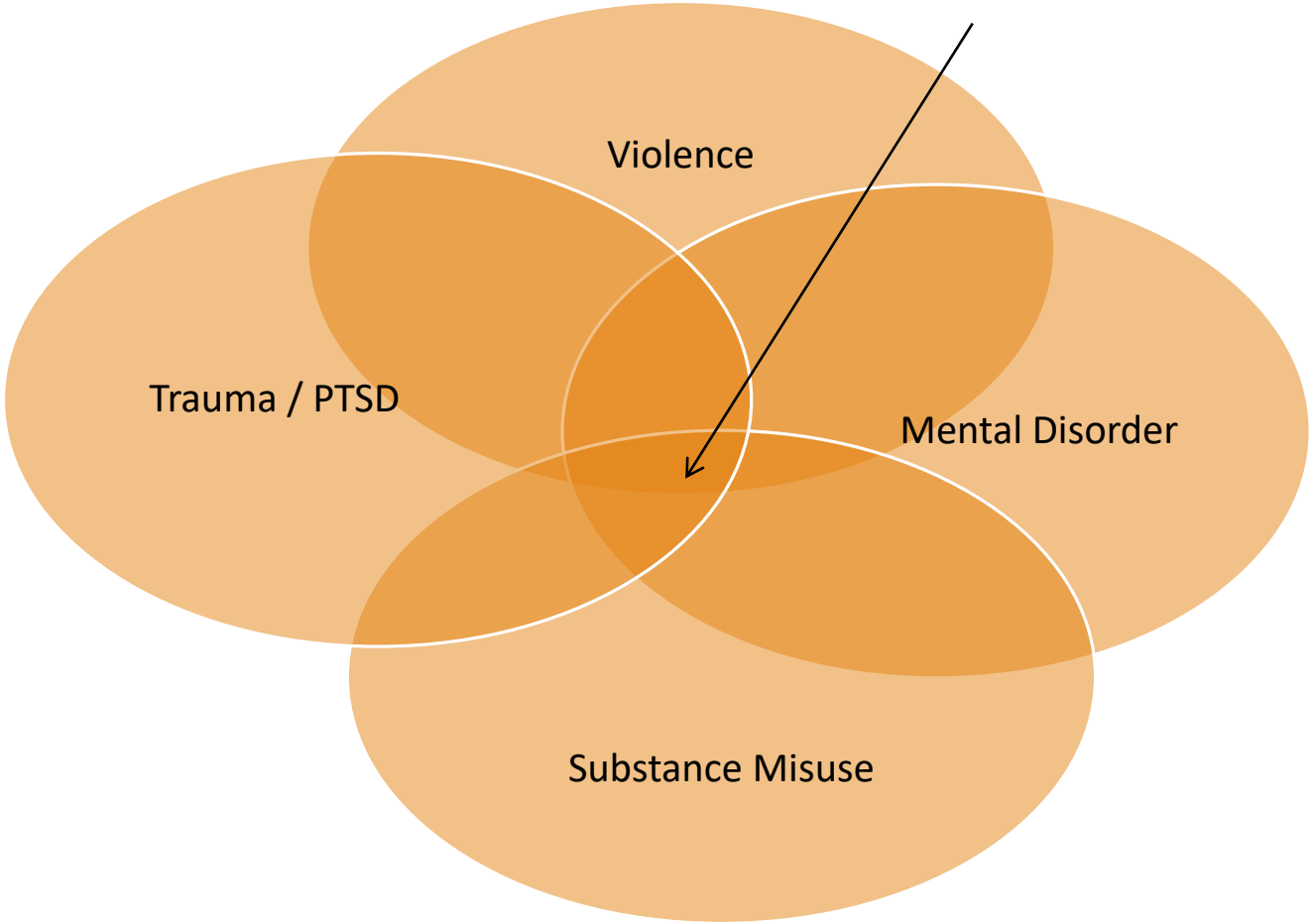
Use of drugs, particularly alcohol and stimulants to self-medicate PTSD symptoms (Stewart, 1998).

Self-medication and violence both associated with binge pattern of drinking / drug use (Leonard et al., 1985; Stewart, 1998).

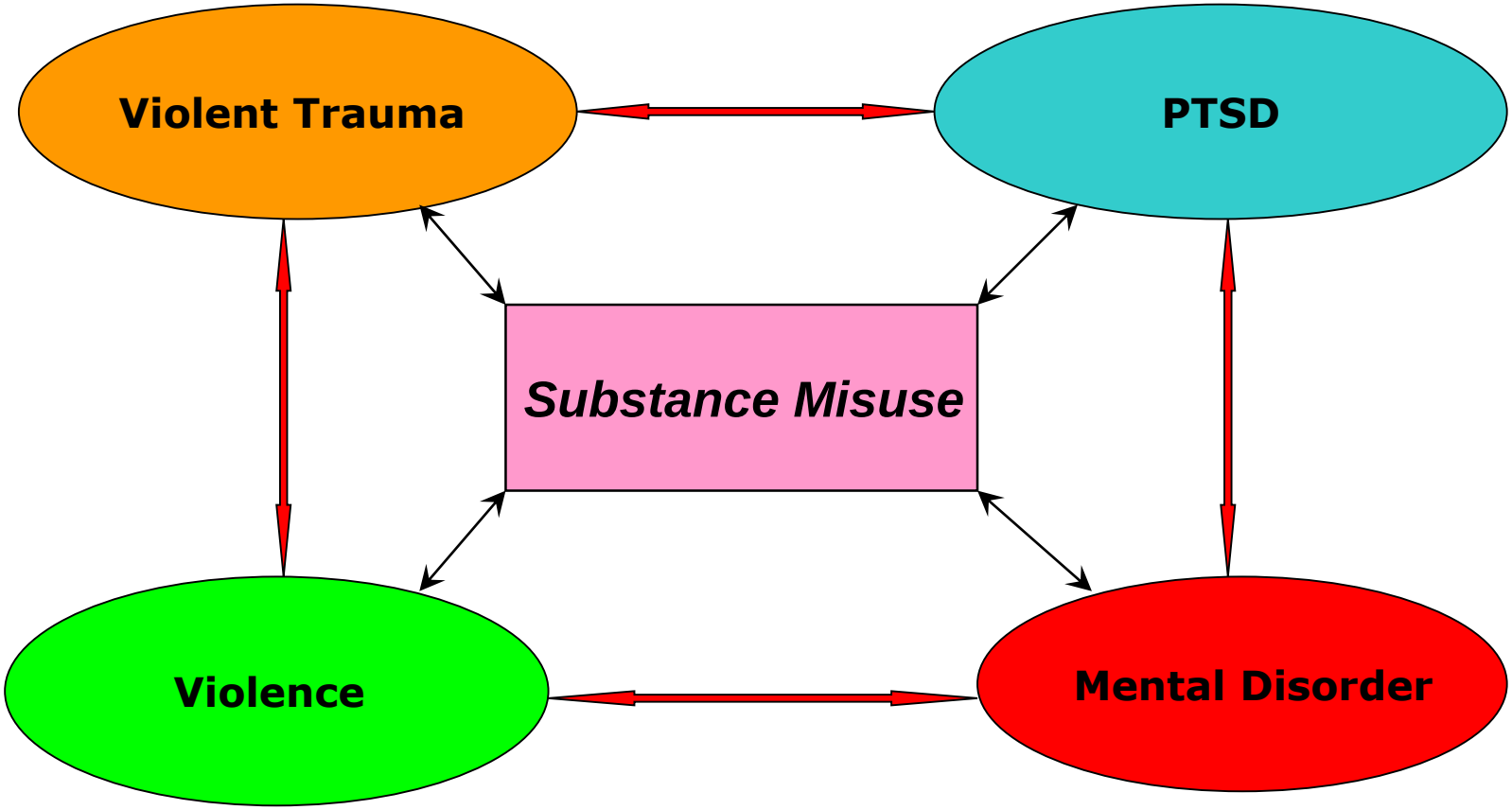
High incidence of undiagnosed trauma / PTSD in offender populations; and in violent offenders in particular.

However, there is a paucity of suitable clinical tools to assess for PTSD in forensic settings which is frequently compounded by patients having experienced multiple incidents of trauma prior to their index offence.

What are we looking at?



A Model of Trauma / PTSD, Mental Disorder, Substance Misuse and Violence (Thomas & Hodge, 2004).



Trauma – mental health/personality problems

High prevalence of early childhood trauma (physical, psychological, and emotional abuse) amongst individuals later diagnosed with schizophrenia. Similarly for individuals diagnosed with a personality disorder, especially antisocial and borderline types (Bollinger et al., 2000; Comacho, 2004; Spartaro et al., 2004).

Early victimization experiences more common in individuals who went on to develop a psychotic illness than any other mental disorder (Bebbington et al., 2004; Spauwen et al., 2006).

Suggested that in some instances a psychosis may emerge as a reaction to trauma (Romme & Escher, 1989).

Mental health symptoms - substance misuse.

Amongst individuals with a mental disorder high prevalence rates of substance misuse (Crawford, 2001; Deganhardt et al., 2001; Regier et al., 1990).

Evidence of specific substances used to cope with a range of associated symptoms (Dixon et al., 1991; Mueser, Drake & Wallach, 1998).

MH symptoms – violent trauma/ PTSD

Evidence that psychotic episode replicates a traumatic experience which may be life threatening (Morrison, Frame & Larkin, 2003: Shaw et al., 2002).

PTSD in mentally ill populations associated with greater emotional stress from being unwell; rather than explicit psychosis symptomatology (Resnick, Bond & Mueser, 2003).

Numerous studies to demonstrate that psychiatric patients are frequently the victims of violent assault (Hiday et al., 1999; McFarlene et al., 2006; Mueser et al., 1998; North, Smith & Spitznagal, 1994).

Level of repeated assault is extremely high in mentally disordered populations (McFarlene et al., 2006; Mueser et al., 1998; Resnick, Bond & Mueser, 2003).

Also need to consider how being sectioned and admitted to a psychiatric unit may be interpreted by a person who is psychotic?

Violent trauma - PTSD

Population rates of PTSD following violent assault variable between different groups but current rates believed to be between 1-5 % for men and up to 10% for women (Kessler, 2000; Creamer, 2000).

On-going disassociative states and negative appraisals seen to maintain PTSD symptoms (Halligan et al., 2003).

Persistent dissociation at 4 weeks post-trauma incident significant predictor of long-term PTSD symptomatology (Murry et al., 2002).

Dissociation whilst recalling the trauma seen to impede cognitive and emotional processing (Foa & Hearst-Ikeda, 1996).

High rates of previous violent trauma among mentally disordered populations (Dutton, 1999).

PTSD – violent trauma exposure – PTSD

Violent revictimisation common in individuals with PTSD (Walsh et al., 2003; McFarlane et al., 2006).

Individuals with PTSD have higher threat awareness and focus on threat related cues hence more likely to misinterpret potential threat situations (Chemtob et al.,1997; Hegadoren et al., 2006).

Number of traumatic incidents and differing types of trauma across life span associated with greater severity of PTSD (Mueser et al., 1998).

Patients in forensic settings with PTSD are often the victims of violent assault.

Likewise, some patients in forensic settings commit violence towards their peers and staff.

Violence - PTSD

High rates of PTSD amongst mentally disordered offenders (Gray et al., 2003; Spitzer et al., 2001: Kruppa, Hickey & Hubbard, 1995).

Index offence responsible for PTSD in high percentage of these individuals (Kruppa, Hickey & Hubbard, 1995).

Increased PTSD scores in violent, as opposed to sexual offenders (Gray et al., 2003; Kruppa, Hickey & Hubbard, 1995).

PTSD symptoms more severe in those who felt regret for their actions (Gray et al., 2003).

Complex PTSD more common than realized and associated with a higher incidence and frequency of physical abuse (Spitzer et al., 2006).

PTSD - violence

Higher rates of violence found in individuals diagnosed with PTSD, and where the presence of PTSD preceded the perpetration of violent acts (Collins & Bailey, 1990).

Recent evidence to suggest that unknown persons more at risk of physical violence, than known persons (Begic & Jokic-Begic, 2001).

Secondary traumatisation of family members living with someone who has PTSD not unusual; especially if physical violence is observed in the home (Galovski & Lyons, 2004).

Kristianson et al., (2004) found that patients in forensic services with PTSD had a more significant violence history and committed more severe acts of violence.

Thomas (2011) study suggested a correlation between trauma symptoms and psychosis symptoms associated with incidents of severe violence.

Trauma - substance misuse

Early childhood trauma linked to a significant risk of developing substance use problems in adolescents (Timmerman & Emmelkamp, 2001; Grant & Campbell, 1998; Gearnon et al., 2003; Kilpatrick et al., 2003).

Violent revictimisation a common experience for adolescent substance users (De Bellis, 2002).

Evidence that many adults misuse alcohol and other substances to cope with a traumatic event (Back et al., 2003; Breslau, et al., 2003).

Substance misuse – violent trauma

The use of substances increases the likelihood of exposure to violent assault (Cunningham et al., 2003; Haller & Miles, 2003).

Through an associated lifestyle that pre-disposes the individual to an elevated risk of exposure to violent incidents (Boles & Miotto, 2003).

Similarly, substance use intoxication increases the individuals susceptibility to the PTSD inducing effect of trauma (Breslau, Davis & Schultz, 2003).

High rates of re-victimisation amongst substance users (Haller & Miles, 2003).

PTSD - substance misuse

Many substance users have PTSD prior to starting misusing substances (Back et al., 2000; 2001).

Range of functional associations between trauma, PTSD and substance use established (Stewart et al., 1998).

Argued that co-morbidity of substance misuse with PTSD is the rule rather than the exception (Brady et al., 2000).

Evidence of a range of substances being involved (Back et al., 2000; 2001; Stewart et al., 1998).

Some evidence to demonstrate the use of substances to cope with specific PTSD symptomology (Coffey et al., 2002; Back et al., 2000; Stewart et al., 1998).

Trauma cues increase cue-sensitivity to substances (Saladin et al., 2003).

We would suggest

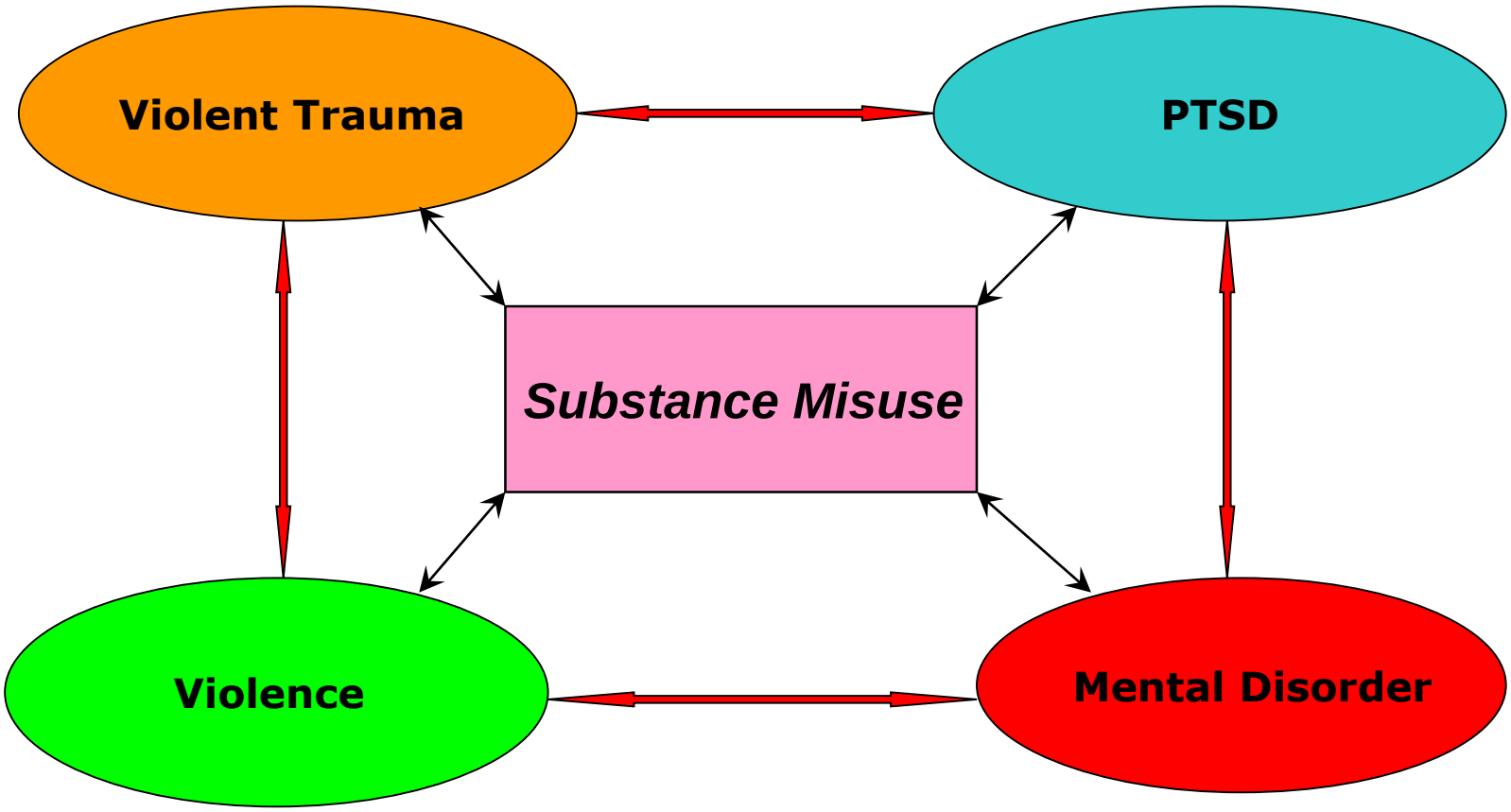
It is suggested that violence associated with substance misuse has its origins in violence-related PTSD, which leads both directly to violence and also to substance use through self-medication of PTSD symptoms. The effects of substance misuse is to make the violence more extreme.

It is also argued that patients with co-morbid mental disorder and substance misuse problems become trapped within this model of substance misuse, mental disorder problems, PTSD and violence.

Most importantly, is that substance misuse becomes the conduit by which the whole cycle maintains itself.

Continued substance misuse following discharge is predictive of relapse and violent recidivistic offending in individuals with a mental disorder (Scott et al., 2004: Rasanen et al., 1998).

Therefore should any one of these factors be affected / triggered it has the potential to increase the likelihood of a corresponding reaction in an associated risk area.



Therapeutic issues

Significant challenges for clinicians in relation to developing a therapeutic relationship within forensic environments.

Workforce has its own problems in relation to alcohol, drugs and other forms of addictive behaviours.

Staff perceptions of drug use in the unit by patients frequently interpreted as a form of anti-social behaviour.

Many patients feel that their substance misuse problems no longer exist because they have been detained and abstinent for a lengthy period of time. This despite the evidence of parallel substance misuse behaviours.

Issues of trust between patients working on treatment related matters and clinicians.

Any acknowledgment by patients of wanting to use is commonly viewed in a negative context.

Potentially differing views between staff delivering substance misuse interventions and the patient's clinical team.

Interventions need to be

Evidence shows that for substance misuse interventions to have a chance to work they need to be based on the latest evidence, be structured, have clear aims and objectives and be of sufficient duration to give participants the opportunity to address their problems.

Be of sufficient duration that participants are able to effectively engage in the therapeutic process and work on what is for many a very challenging subject area (Corrigan & Bogner, 2007; Meier & Donmall, 2006).

We would also suggest that they should focus not just on alcohol and drugs but include any form of addictive behaviour they may have or are participating in.

These may include activities such as; gambling, gaming, physical exercise, abuse of prescribed medication, excessive use of caffeine drinks, pop, sweets.

The importance of programme manualisation

Not without its controversies; suggested limit a clinician's flexibility, lack of attention to the therapeutic alliance between patient and clinician and lack of emphasis on clinical judgement (Borntrager et al., 2009).

McMurran and Duggan (2005) however argue that the advantage of manualised psychological treatment programmes include: the promotion of evidenced based practice, the enhancement of clinical integrity, the facilitation of staff training and the replicability of treatment. It also allows for the evaluation of individual modules and the involvement of less highly trained staff.

Mullen (2006) argues that the use of manualised substance misuse interventions enables the patients clinical team to know the programmes treatment goals as well as the therapist delivering them.

Programme content

First manualised programme was written in 1994 and redrafted in 2001. In 2009 it was extensively rewritten and following completion of a PhD study in 2011 these findings were incorporated into the programme.

The long programme compromise 5 modules and is spilt into two elements. Element 1 comprises two modules (26 sessions); Element 2 has 3 modules comprising 31 sessions.

A shorter version of the programme is used in medium secure services (need number of sessions here Alan).

The programme was included in the Department of Health, Dual Diagnosis Good Practice Guide (2007) as an exemplar of best practice.

Programme ethos

Motivational based ethos.

Developing therapeutic alliance.

Utilises a Case Formulation approach.

Relapse management philosophy.

Developing insight and understanding of their risk areas and empowering them to manage these.

Not an abstinence based programme.

Not a trauma treatment programme however encourages patients to acknowledge trauma symptoms and advocates the need to manage these in the absence of substances.

Programme content

Developing an understanding of substance cravings and there importance; includes the use of cue exposure.

Exploring the links between an individuals substance use and offending behaviour.

Similarly looking at how the individuals substance misuse relates to their mental health problems and any personality risk related traits they may experience.

Integration of any none substance related addiction problems and parallel behaviours into session content.

Identification of personal risk areas and how these interrelate.

Skills for managing substance misuse and any related risk factors.

Practising the application of these skills.

Identifying relapse risk factors in relation to substance misuse, trauma / PTSD, mental health and personality issues.

Developing a relapse strategy for their next potential placement.

Programme delivery and session structure.

Once weekly with a break after module 2 for interim reports.

Each session approximately two hours duration.

Individual aims and objectives for each session.

Evidence base for subject area.

Support notes for facilitators.

Usually 3 facilitators per group.

Usually 6-8 patients a group if more then an extra facilitator helpful.

Programme manuals for facilitators, extensive theory manual, support notes for participants clinical team, individual session feedback sheets circulated following each session.

Assessment and outcome measures

Staged assessment protocol: screening; assessment phase; pre-group phase, mid-group, and post group.

Assessment tools includes; Addictive behaviours screening tool. SADD for alcohol, SDS for cannabis, amphetamine, cocaine, benzodiazepines and heroin. Problem gambling severity index and problem gaming / internet tool.

Goal attainment scale which looks at 10 key areas: locus of control; responsibility for offending; insight and understanding; realistic appraisal; use of external sources of support; use and application of internal sources; risk recognition; coping skills; cravings; parallel behaviours.

To date

Run the long programme over 25 times (2016) with over 550 patients completing the full programme. Less than 20 patients have dropped out of treatment during that time.

Similarly well over 250 patients completed the short programme in medium secure services within the trust. Similar findings in relation to programme completion.

Long-term outcomes following discharge difficult to evaluate because substance misuse is only one of a range of treatment interventions that patients experience within a forensic service.

What have we found

Motivational based approaches are effective in increasing participant commitment to addressing their substance misuse problems.

Case formulation approach works well and helps participants appreciate the complexity of their problems and better understand their own risk factors.

Helping the individual understand the intricacy of their problems enables and empowers them to do something about it and at the same time increases the therapeutic alliance between them and the group facilitators.

Acknowledging previous incidents of trauma enables patients to recognise their trauma symptoms, recognise how they link with their other risk factors and consider how they may manage these risk areas in the future.

As the individuals self-confidence increases they challenge both their own beliefs as well as those of their group peers and are more likely to follow an abstinence philosophy towards substances.

In addition,

In some instance patients are perceived as being more dangerous at the end of the programme simply because we have a better understanding of their risk factors than was previously the case.

On the whole a group approach works well however there are a small group of individuals for whom group work is not suitable.

Opportunity to include patients in subsequent groups if they require additional work or a refresher because the period of time since first undertaking substance misuse work.

Staff training and retention

Staff training needs to be on the evidence base related to the intervention they are delivering.

Specialist substance misuse training suitable for staff working in forensic environments is not readily available.

Likewise, the availability of skills based training in delivering group interventions and motivational working are generally not available.

Manualised programmes are essential and help maintain integrity of the intervention being delivered. They also help the facilitators develop their knowledge and understanding of the subject area and allow them to become experts at delivering the programme content in the way it was intended.

Staff turnover and retention is always going to be an issue. It takes years to develop an effective team to deliver the programme.

Remember

Therapeutic alliance remains the best predictor of treatment outcome.

We need to remember that specialist addiction services treatment models have been shown not to fit well with mainstream psychiatric services never mind forensic populations (Bowden-Jones et al, 2004). Moreover, the philosophy of some approaches available within the community drug and alcohol services are contra-indicated for patients detained in forensic settings (McMurran, 2007).

The literature shows that well structured evidence based substance misuse programmes that are focussed and have well defined objectives are more effective in reducing violent behaviour in violent offenders than violent offender programmes (Kraanen et al., 2009; Orwin, Maranda & Ellis, 2001).

Packard & Fazel (2013, pg5)

"the long-term hospital stays imposed upon forensic patients offer an opportunity to address substance misuse, which given the cost of secure care, should be seized so as to maximize positive outcomes for patients, and reduce the likelihood of re-offending and hence the need for further secure hospital care and the cost this imposes in the future."

A whole systems approach?

Substance misuse interventions should be a core component of treatment provision across forensic services regardless of gender and mental disorder diagnosis.

Substance misuse interventions should be readily available as a core element of a patient's treatment at pertinent times in the patient's pathway.

Substance interventions need to be delivered by a multi-disciplinary staff group who have the necessary training to enable them to deliver the intervention in a credible, capable and competent manner.

Substance misuse training for staff delivering substance misuse interventions should be comprehensive and related to the evidence base specific to the patient population they are working with. Similarly, awareness raising of the programme content and evidence base should be widely available to the patients clinical team.

Appropriate clinical supervision for the programme facilitators should be readily available and considered best practice and not viewed as a luxury.

Succession planning and staff resourcing should be integral to the whole process of treatment delivery.

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