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Substance Misuse Treatment Framework Health and Wellbeing Compendium

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Purpose and structure

This document is designed to inform and assist service planners, commissioners, substance misuse and wider health and social care providers working with those with problematic substance use, including those not currently accessing services. The document provides an overview of the principles of harm reduction and outlines the context in relation to theoretical and operational approaches. Links to relevant strategy and policy documents are provided along with a summary of the evidence relating to the provision of harm reduction services specifically aimed at improving the health and wellbeing of individuals with problematic substance use.

This guidance document forms part of the suite of harm reduction and treatment specific guidance for those working in Wales available at: http://wales.gov.uk/topics/housingandcommunity/safety/substancemisuse/treatmentframework/?lang=en

This guidance document has been structured to provide a clear summary of evidence along with recommendations for action under seven specific elements of health care:

- Oral health
- Sexual health
- Safer injecting and other routes of ingestion
- Wound management
- Prevention, testing and treatment for blood borne viruses
- Reducing fatal and near fatal poisonings
- Targeting especially vulnerable groups.

Strategic context

'Working Together to Reduce Harm' (Welsh Government | Working Together to Reduce Harm The Substance Misuse Strategy for Wales 2008 – 2018) is the Welsh Government's 10 year strategy for tackling the harms associated with the misuse of alcohol, drugs and other substances in Wales. It sets out a clear national agenda for tackling the harms associated with substance misuse for those working within the field, including planners and commissioners. The strategy is underpinned by 4 key aims; reducing the harms to individuals; improving the availability and quality of education, prevention and treatment services; making better use of resources and embedding the core Welsh Government values of sustainability, equality and diversity.

The Welsh Government 'National Core Standards for Substance Misuse Services in Wales' (Welsh Government | National Core Standards for Substance Misuse Services in Wales) applies to the Responsible Authorities (Local Health Boards, Local Authorities, Police Force, Police Authorities and Fire Services) of the Community Safety Partnerships (CSPs) and Substance Misuse Area Planning Boards (APBs) and all providers of substance misuse treatment services in Wales.

The Welsh Government 'Sexual health and well-being action plan 2010-2015' (Welsh Government | Sexual Health And Wellbeing Action Plan For Wales, 2010 - 2015)

The Welsh Government 'Blood borne viral hepatitis action plan 2010-2015' (Welsh Government | Blood borne viral hepatitis action plan for Wales 2010 – 2015)

Methodology

The evidence within this document is drawn from a range of sources including databases and websites. The databases included MEDLINE, MEDLINE Daily Update, AMED, BNI and EMBASE. Websites included NICE, Health Protection Agency, Welsh Government, Department of Health. Evidence is also drawn from literature supplied by those who work in the harm reduction field such as KFx, Lifeline Publications and HIT. The report will not examine the evidence base behind substitution treatment or psychosocial interventions with opiate substitution treatment. These two central health interventions targeting problematic substance users have been the subject of thorough review elsewhere^{1,2,3}.

Roles and responsibilities

The 7 APBs will be responsible for ensuring delivery of the compendium. Harm Reduction Groups in each APB area must develop an action plan focusing on areas for development within services. Harm reduction does not solely lie with drug and alcohol agencies but spans a variety of services such as criminal justice, housing and health. It is therefore important that harm reduction groups engage a variety of stakeholders to enable a wide range of interventions to be developed to ensure service users' health and well being are at the forefront of treatment.

Overview of harm reduction principles

The harm reduction approach to substance use is based on a strong commitment to public health principles. It is evidence based and cost effective when delivered in a targeted way at reducing the harms and risks to an individual and the community in which they live⁴⁻⁷.

Harm reduction:

- Is pragmatic
- Prioritises goals
- Is based on humanist values
- Focuses on risks and harms
- Does not focus primarily on abstinence but does incorporate recovery as part of a range of goals and outcomes over time
- Seeks to maximise the range of intervention options available
- Is facilitative rather than coercive and grounded in the needs of individuals^{5,6}.

Harm reduction practitioners acknowledge the significance of any positive change that individuals make in their lives. As such, harm reduction services are designed to meet people's needs where they currently are in their lives.

The objective of harm reduction in a specific context can often be arranged in a hierarchy with the more feasible options at one end (e.g. measures to keep people healthy) and less feasible but desirable options at the other end. Abstinence can be considered a difficult to achieve but desirable option for harm reduction in such a hierarchy. Keeping people who use drugs and alcohol alive and preventing irreparable damage is regarded as the most urgent priority.

Harm reduction may be seen as an integral part of recovery⁸. In Wales, recovery from problematic drug or alcohol use is defined as a process that enables an individual to make changes which improve their quality of life. The Welsh Government substance misuse strategy outlines the process and goal of recovery as "enabling, encouraging and supporting substance misusers to reduce the harm they are causing to themselves, their families and communities, and ultimately return to and maintain a life free of alcohol or drug dependency".

The harm reduction approach is designed to be relevant to all psychoactive drugs including controlled and licit drugs, alcohol, tobacco and pharmaceutical drugs.

Current provision of harm reduction based substance misuse services in Wales

Throughout Wales harm reduction services are in place for individuals with problematic substance use including:

- Needle syringe programmes (NSPs), formerly known as needle exchanges
- Opioid substitute treatment (OST)
- Wound management
- Safer injecting advice and information
- Psychosocial interventions including brief interventions, structured counselling, diversionary activities and alternative therapies
- Blood borne virus testing and treatment (specifically hepatitis B, hepatitis C and HIV)
- Hepatitis B vaccination
- Provision of take-home naloxone with training to reduce fatal poisoning
- Provision of condoms and safer sex advice.

Provision of the range of harm reduction services to all those requiring them should be consistent across areas whilst addressing local needs and specific trends in substance use. Services should be of high quality and delivered in a non-judgemental, confidential manner.

Current provision of harm reduction advice and interventions focus primarily on illicit drugs. With the changing nature of drug use towards use of new and emerging psychoactive substances that may not be classified under the Misuse of Drugs Act

(1971) and subsequent additions, proactive outreach to individuals who would not access mainstream substance misuse services is required.

Problematic substance misuse is defined as "intoxication by – or regular excessive consumption of and/or dependence on – psychoactive substances, leading to social, psychological, physical or legal problems. It includes problematic use of both legal and illegal drugs, including alcohol".

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Chapter 1 - Oral health

Background

People with substance misuse issues, including both drug and alcohol users, have special dental needs¹ and experience difficulty in accessing dentistry services². Evidence exists for poor oral health amongst those using methamphetamines, alcohol, opioids, marijuana and cocaine³. Dental treatment and rehabilitation has been shown to impact positively in recovery from problematic drug use¹.

Prevalence of oral health problems and access to services

UK studies indicate that nearly 70% of drug users reported oral health problems compared to half of non-drug users, however, 60% of the non-drug using group attended dental health services regularly compared to 29% of drug users⁴. Drug users are also likely to access oral health services only when in severe pain². Homelessness may affect oral hygiene due to lack of running water. Periods of intense drug use (binges) may result in lack of oral care (tooth brushing) for days at a time¹.

Barriers to accessing services

Barriers include²:

- Homelessness/social exclusion
- Low self-esteem
- Fear/anxiety
- Inability to meet perceived cost of treatment
- Unsympathetic dental professionals
- Stigmatising behaviour by professionals
- Inability to afford dental treatment
- Being refused treatment by dentists.

There are a range of dental issues that may be presented:

Tooth decay/dental caries: Occur as a consequence of poor dental hygiene. If teeth are not routinely and thoroughly cleaned, plaque build up occurs. The acids in plaque dissolve the enamel surface of the tooth and create cavities. If untreated, tooth abscesses can occur with eventual tooth loss.

Gingivitis: Inflammation of the gums due to the long-term effects of plaque deposits. Gingivitis is a form of periodontitis and occurs as a consequence of poor dental hygiene.

Periodontitis: Occurs when inflammation or infection of the gums (gingivitis) is untreated or treatment is delayed. Infection and inflammation spreads to the ligaments and bone leading to eventual tooth loss. Complications include infection or abscess of soft tissue, infection of jaw bones, tooth abscess.

Bruxism: Teeth grinding and clenching which may lead to temporomandibular joint disorder pain.

Xerostomia: Dry mouth/reduction in saliva. Saliva provides a natural protective mechanism against decay and is a resource of calcium, phosphate and fluoride which all help to remineralise tooth enamel. Salivary proteins also act as antibacterial agents. Salivary dysfunction can lead to rapid deterioration of dental enamel. Opioids, amphetamines and alcohol all reduce production of saliva⁵.

Oral cancers: Over 90% of oral cancer is oral squamous cell carcinoma (OSCC). Most affect the lip, tongue and floor of mouth. In 2007, a total of 328 new cases of oral cancer were reported in Wales, representing a rate of 8.7 per 100,000 population, higher than England and the UK average of 7.6 per 100,000 population. Rates of oral cancer are highest amongst the most socially and economically disadvantaged in the general population particularly due to higher tobacco consumption, alcohol and poor nutrition.

There are a number of reasons for increased dental need amongst people with substance misuse issues⁶:

(http://www.smmgp.org.uk/download/others/other060.pdf)

- Poor nutrition
- Lack of dental hygiene
- Low pain tolerance
- Masking of dental pain/self-medicating pain
- High sugar consumption
- Use of carbohydrate additive in drug mix
- Carbohydrate cravings
- Xerostomia/dry mouth
- Lack of access to dental services
- Clinical depression leading to apathy towards dental (and general) health care.

Evidence

Alcohol

Individuals with substance misuse issues are more likely to exhibit other risk factors for oral cancer such as alcohol use and poor diets. The risk of OSCC is 80 times greater in a patient showing high levels of tobacco and alcohol use⁷.

High alcohol users also experience higher rates of tooth surface loss which may be due to chemical erosion of alcohol and/or mixers or to gastric reflux caused by alcohol use⁸. In addition, dental trauma is associated with high alcohol consumption. Dental trauma/facial injuries and jaw fractures may result from alcohol related falls, assaults or fights.

Amongst hazardous or harmful alcohol users, poor diet/malnutrition impacts on oral health and dietary advice and support is recommended along with access to dental health services.

Heroin and other opioids including opioid substitute treatments (OST)

Heroin and other opioid using individuals, including those accessing OST tend to have poor nutrition, high intake of sugary products, lower standards of general and oral hygiene, higher levels of dental anxiety and lack of regular dental or medical care⁶.

Methadone and other opioids suppress salivary resulting in xerostomia/dry mouth in turn leading to plaque accumulation and poor oral health⁹. There is some dispute that methadone (OST) may lead to an increase in tooth decay due to the sugar content, however, widespread availability of sugar free methadone can reduce risk. Higher incidence rates of bruxism are also observed in opioid-dependent patients leading to wearing down of the tooth enamel and pain¹⁰. 'Methadone mouth' is a term used to characterise rapid tooth decay and extreme poor oral health in longer term OST users.

Dental treatment of opioid users may be complicated due to other physical health issues including infective endocarditis*. Opioid users have a higher incidence of infective endocarditis and complications may occur because of the increased risk of acquiring infections from dental or oral bacteria. In addition, the provision of dental treatment may be further complicated by poor pain tolerance and/or thrombocytopenia (poor clotting of the blood due to a reduction in platelets)⁶.

Cocaine, amphetamine, MDMA and other stimulants

Cocaine and other stimulants have a vasoconstrictive effect (narrowing of the blood vessels) leading to an increase in the potential for ulceration and tissue atrophy (wasting away of tissue).

The means of ingestion of cocaine and other stimulants may impact on the severity of oral damage e.g. the application of cocaine directly on to the gums, can produce non-healing defects: localised bone loss; bleeding gums¹² and oral mucosal ulcerations¹³. Use of MDMA is associated with tooth wear (bruxism) and periodontal disease^{14, 15}.

Grinding and clenching of teeth (bruxism), biting the inside of cheeks and lips and wanting to chew something were all commonly reported behaviours amongst users of MDMA in particular and dry mouth (Xerostomia) were common amongst all stimulant users. Effects of cocaine and other stimulants caused constant grinding of teeth leading to sensitive and worn teeth followed by pain in the jaw when opening or chewing¹. Amphetamine injectors, especially those with poor housing, hygiene and nutrition may be at increased risk of experiencing dental pain and problems relating to injectors of other drugs¹⁶.

^{*} Infective endocarditis is an infection that affects some part of the endocardium. The endocardium is the tissue that lines the inside of the heart chambers. The infection usually involves one or more heart valves which are part of the endocardium. It is a serious infection that is life-threatening.

Particularly vulnerable groups:

Homeless

Homeless individuals represent a particular at-risk group, particularly due to concurrent tobacco and substance (alcohol and drug) misuse. Findings from homeless populations, both street and hostel based, indicated that periodontal disease was found in 92%, along with other dental issues including missing, decayed and filled teeth. High levels of dental anxiety were also observed with 28% reporting dental phobia. A number of dental impacts were commonly reported including toothache, difficulty eating, feeling self-conscious or ashamed of their teeth¹⁷.

Individuals with hepatitis C infection

Xerostomia is a symptom associated with hepatitis C infection, recorded objectively in half of patients. The onset of clinical depression amongst a proportion of hepatitis C patients, and the initiation of anti-depressant medication as a consequence also increased levels of xerostomia and resultant dental disease¹⁸.

The risks of hepatocellular dysfunction (including poor clotting) and potential toxicity of prescribed medication present additional issues for dental health providers. Higher levels of caries/tooth decay have been observed in hepatitis C patients, across all age groups, when compared to matched non-patient participants. Patients also reported significantly more painful, aching mouths and difficulty relaxing due to dental problems¹⁸.

Recommendations

- Substance misuse treatment providers, primary and dental health providers, homelessness service providers, prison health services and those working with vulnerable groups including social services should consider dental and substance misuse problems as associated co-morbidities and dental care should be incorporated in each individuals care planning³.
- Information, education and advice should be provided to all individuals, including young people, regarding the implications of substance misuse (tobacco, alcohol and drugs) and poor diet on dental health³.
- Specific dietary advice should be provided when working with heroin/ opioid users and those initiating OST, along with the provision of sugar free methadone and use of a straw for the ingestion of methadone to decrease contact with tooth enamel.
- All treatment providers must have pathways in place to ensure service user's access to dental hygienists/dental health service practitioners with experience of this client group and encourage registration with an appropriate dental service. For highly socially excluded groups including homeless populations, outreach or mobile dental services should be considered.

- Working with relevant post-graduate dental training providers, provide training for health care professional on oral health and disease and practical oral care, and provide formal training for dental health teams relating to working with those with substance misuse issues and specific medications/drug interactions¹⁹.
- Undertake regular health needs assessment as part of core treatment, including oral health, to ensure services are sufficient to meet local needs.

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Chapter 2 - Sexual Health

Background

Sexual health may be defined as 'a state of physical, emotional, mental and social well-being related to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence¹.

Problematic substance users (drugs and/or alcohol) are at increased risk of sexually transmitted infections (STIs)². Specific harm reduction advice regarding safer sex and prevention of STIs and blood borne virus (BBV) infection should be provided at all Tier 2, 3, and 4 level substance misuse services along with interventions such as free condom provision and signposting/referral to specialist sexual health clinics for STI and BBV testing.

The Welsh Government 'Sexual Health and Wellbeing Action Plan 2010-2015' provides a framework for the integrated approach to improving sexual health and wellbeing and the delivery of sexual health services, available at: http://wales.gov.uk/docs/phhs/publications/101110sexualhealthen.pdf

Epidemiological trend data on the prevalence of HIV and STI infections is collated by Public Health Wales and is available at:

http://www2.nphs.wales.nhs.uk:8080/CommunitySurveillanceDocs.nsf/3dc04669c9e1eaa880257062003b246b/3c401826e20f106e8025786900356115/\$FILE/HIV%20and%20STI%20trends%20in%20Wales%20Report%202009-10_v1b%20201.pdf

Potential risks/harms:

Sexually transmitted infections (STIs)3

Chlamydia – is easily passed from one person to another through unprotected sex (not using a condom). Genital chlamydia is the most common bacterial STI in the UK, particularly amongst men and women aged under 25. Only around 25% of women and 50% of men will develop physical symptoms and therefore regular testing in sexually active individuals is required. Implications of untreated infection are most common and most severe in women and include:

- Pelvic inflammatory disease, (this affects 10-40 per cent of women with chlamydia) and can cause chronic pain
- Ectopic pregnancy (where the fertilized egg starts developing outside the womb)
- Infertility
- Abscesses in the fallopian tubes and on the ovaries
- Liver infections.

Implications of undiagnosed infection in men include:

- Urethral infection (affecting the tube from the bladder to the tip of the penis)
- Inflammation of the prostate gland
- Scarring or blocking of the tubes which carry sperm (epididymitis), resulting in decreased fertility
- A form of arthritis (Reiter's syndrome)
- More than one third of babies born to infected women develop eye or lung infections and there is some evidence which shows that untreated chlamydial infections in pregnant women can lead to premature delivery.

Gonorrhoea – is the second most common bacterial STI in the UK and is transmitted through unprotected vaginal, anal or oral sex with an infected partner. An infected person may have no symptoms and therefore may transmit the infection without knowing. Untreated gonorrhoea can have especially serious effects for young women as pelvic inflammatory disease (PID) can develop which is hard to treat and can cause further complications such as infertility and a higher risk of ectopic pregnancy.

Genital herpes – is a long-term condition caused by the herpes simplex virus (HSV). Following infection, the virus remains dormant (inactive) for most of the time. There are often few or no initial symptoms. However, certain triggers can activate the virus, causing outbreaks of painful blisters on the genitals and surrounding areas. There's no cure for genital herpes, but the symptoms can usually be effectively controlled using antiviral medicines.

Genital warts – occur as a result of a viral skin infection that is caused by the human papillomavirus (HPV). Genital warts are usually painless and do not pose a serious threat to a person's health. However, they can appear unsightly and cause psychological distress. HPV is not a single virus, but a family of over 100 different strains of viruses. Of these, 40 strains can infect the genital tract and are sexually acquired. Certain HPV infections can cause cervical cancer and other cancers.

Syphilis – is a bacterial infection that may be contracted through unprotected intercourse and oral sex. Rates of syphilis infection have increased substantially since 1997 and concern has been raised regarding potential transmission among men who have sex with men (MSMs) and heterosexual men and women. If diagnosed early, syphilis can be easily treated with antibiotics. If left to progress untreated, syphilis can go on to cause serious conditions such as stroke, paralysis, blindness or death. HIV co-infection with LGV and syphilis is common.

HIV – HIV remains one of the most important communicable diseases in the UK and is associated with serious morbidity and significant mortality. In 2009, the number of people living with HIV in the UK reached an estimated 86,500. A quarter of these people were unaware of their infection⁴.

HIV may be transmitted via bodily fluids: blood, vaginal fluids, semen, breast milk and other fluids containing blood. Whilst unprotected sex represents the greatest risk of transmission, people who inject drugs (PWIDs) are vulnerable to HIV through the sharing of injecting equipment such as needles and syringes and injecting

paraphernalia. The level of HIV infection among PWIDs in England and Wales is higher now than at the start of the decade, with around one in 75 IDUs currently infected with HIV, although marked regional variation in prevalence exists.

Highly active antiretroviral therapies (HAART) have resulted in substantial reductions in AIDS incidence and deaths in the UK.

Amenhorrea and Pregnancy

Problematic substance use in women can lead to amenhorrea (cessation of regular periods) which when coupled with unprotected sex can result in an individual not knowing, for an extended period, whether they are pregnant.

Pregnancy amongst problematic drug and/or alcohol users, whether planned or unplanned, represents a challenge both to the individual and to health services providing care. Maternal problematic substance use can lead to implications for the baby including Foetal Alcohol Spectrum disorders and neonatal withdrawal syndromes. Women using cocaine during pregnancy are more likely to experience miscarriage or premature labour⁵.

There are estimated to be between 250,000-350,000 children born to problematic drug users in the UK⁶. Research indicates that in Wales, amongst current or ex-injecting drug users, two-thirds were parents with an average of 2-3 children, however, only one quarter of these had their children living with them⁷.

Contraception is free of charge and easily available within the UK.

Sexual violence

Sexual violence has been defined as "any sexual act, attempt to obtain a sexual act, unwanted sexual comments or advances, or acts to traffic or otherwise directed, against a person's sexuality using coercion, by any person regardless of their relationship to the victim, in any setting, including but not limited to home and work. Sexual violence may have significant consequences to physical and mental health and is associated with an increased risk of a range of sexual and reproductive health problems, with both immediate and long-term consequences. The influence of alcohol and drugs on sexual assault has been recorded in the British Crime Survey (BCS) which indicated that approximately 35% of sexual assault victims believed the offender was under the influence of alcohol. Women who experience physical abuse are more likely to use alcohol and drugs. Couple drug-involvement has been found to be directly associated with sexual violence and concomitant sexual HIV risks.

Evidence

Sexual risk taking includes: unprotected sex, sex without contraception, multiple sexual partners, anal sex, sex with more than one person at a time. Drugs and/or alcohol may be used to facilitate sexual encounters, to enhance the sex act or to counter the effects of another drug.

Alcohol may facilitate sexual encounters but is linked to sexual problems such as impotence. Certain stimulant and hallucinogenic drugs increase sexual arousal, reduce anxiety and enhance sensual perceptions, sexual performance and

disinhibition in users¹³. Mephedrone and other stimulants may be consumed in part because of the potent sex properties, however, use is also associated with increased risk of STIs through condom breakage or vaginal/anal fissure or bruising as a result of aggressive or prolonged intercourse¹³.

Casual sex encounters are often facilitated by alcohol or drug use increasing the likelihood of the consequences of sexual risk taking such as unprotected sex¹⁴. Women drug users are less likely to attend for cervical screening and are at higher risk of the consequences of unsafe sex such as unplanned pregnancy, STIs and pelvic inflammatory disease¹⁵. It is estimated that less than half of all female sexually active drug users use any form of contraception and less than a quarter use condoms¹⁵.

Vulnerable groups

Young people

Compared to those with no history of substance misuse, adolescent problematic drug and/or alcohol users are more likely to have earlier age of onset to sexual activity, more sexual partners, less consistent use of condoms, increased rates of STIs and a greater prevalence of HIV testing. In addition, higher rates of STIs were found in females within this latter group as well as higher numbers of pregnancies. Substance use remained associated with increased risk taking behaviour into young adulthood¹⁶. These findings have been replicated in older populations of drug users i.e. those over 25 years, with the additional finding that those with problematic substance use were more likely to have exchanged sex for money or drugs¹⁷.

Sex workers (commercial or survival)

The exchange of sex for money or drugs (commercial and survival sex working) represents additional sexual health risk. Often a vicious circle may occur – sex work generates drugs or money to buy drugs and problematic drug use facilitates the continuation of sex work¹⁸. Higher rates of sex work are found among injecting and non-injecting female substance users^{19, 20}. Sex workers have higher rates of STIs and are at greater risk of transmitting these onwards through unprotected sex²¹. In addition there is a greater risk of physical and sexual victimisation and violence¹².

Sex work (for money or drugs) is not restricted to females and substance misuse service planners and providers should ensure pro-active street outreach provision aimed at both males and females. Fast track substance misuse services aimed at sex workers may promote engagement and retention by addressing barriers to access including waiting times, restrictive appointment times and transport difficulties leading to a reduction in the frequency and quantity of opiate use, a reduction in criminal activity and an improvement in physical and mental health²². Peer support is recognised as an important method of disseminating information on safer sex and reducing risk from violent clients. Commercial sex workers who act as peer educators in promoting condom use with both paying and non paying partners were more successful than health care workers²³.

Men who have sex with men (MSMs)

Research demonstrates a consistent association between substance use and sexual risk, particularly among MSMs²⁴. Use of drugs and alcohol is widespread amongst this population, with poly-drug use being common²⁵. MSMs are at increased risk from STI and HIV infection and onward transmission^{26,27,28}.

People who inject drugs

For people who inject drugs there is the added potential risk of HIV transmission by engaging in sex and/or injecting risk behaviours²⁹. PWIDs have a higher risk of venous thromboembolism so oestrogen containing contraceptives are best avoided. If the individual has active hepatitis all progesterone methods are contraindicated, as are the combined oral contraceptives. The most useful contraceptive is the intrauterine contraceptive device (IUCD) as it is long acting thereby overcoming the issue of compliance in those with a chaotic lifestyle, and it can be used in those who have HIV or active hepatitis¹⁵.

Recommendations

- Discussion around sexual health, contraception, STI and BBV screening to be included as part of care planning discussions. Encourage regular screening for STIs in all substance using populations.
- Safer sex advice and information along with referral and signposting to specialist sexual health clinics should be standard practice in all substance misuse services and in other young persons and health related settings. Information regarding the risks of unprotected oral sex and STI transmission should be included.
- All women in contact with treatment services (both structured and unstructured) should have their contraception needs discussed regularly and long acting reversible contraception provided where need identified.
- Condoms should be provided in a range of substance misuse settings free of charge. In addition, advice should be offered with regard to correct use of condoms including female condoms.
- Proactive/assertive outreach sexual health services should be in place for hard-to-engage groups of problematic substance users who would otherwise not access mainstream services. Where this is not possible, staff should be encouraged to support service users to attend mainstream sexual health clinics.
- Pregnant problematic substance using women should be engaged with multidisciplinary treatment as early as possible, where they can be monitored regularly³⁰.

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Chapter 3 – Safer injecting and other modes of drug use

Background

Safer Injecting

Safer injecting is about more than administration of the actual drug, whether it be intravenous, intramuscular or subcutaneous injecting. Safer injecting advice encompasses the whole injection process and decisions made about each component of the process can have an impact on the potential harm to people who inject drugs (PWIDs). There are inherent risks when injecting any substance but these can be minimised if the PWID incorporates as many safety measures as are practical.

Issues include:

- What drug or combination of drugs are being injected
- Selection of appropriate equipment including the size of barrel as well as length and gauge of needle and paraphernalia
- Intended method of administration intravenous (IV), subcutaneous (SC) or intramuscular (IM)
- Preparation of the substance
- Site of injection
- Environment Hygiene issues include clean hands, preparation area, whether injecting is occurring in a private or public space
- Safe disposal of used injecting equipment to reduce risk of reuse or sharing.

Robust evidence based advice and information is available for all those working with PWIDs to facilitate a reduction in the potential frequency and severity of the harms associated with injecting¹⁻⁶. Anyone working with PWIDs should be able to offer support and information on safer injecting, preventing initiation into injecting, safer modes of drug use and referral/signposting to specialist substance misuse services.

Welsh Government has published a national guidance document providing a clear framework for the delivery of needle and syringe programmes (NSPs), including community pharmacy available at: http://wales.gov.uk/docs/dsjlg/publications/commsafety/110628needleen.pdf.

The guidance concerns the provision of NSP services to:

- Individuals who inject illicit substances
- Individuals who inject non-prescribed anabolic steroids and other performance and image-enhancing drugs (SIEDs)
- Individuals at risk of initiation into injecting.

The guidance also covers all aspects of NSP service delivery for both adults and young people (under 18 years old).

Evidence

Prevention of infections and damage as a consequence of injecting

In order to reduce the potential for bacterial or viral infections and site damage, NSP services should ensure 100% coverage of equipment (coverage here referring to sterile needles, syringes and all required paraphernalia including cookers, swabs, filters) for each injecting event². At present, across the UK, coverage is estimated to be 25-30% i.e. the use of sterile injecting equipment for one in every 3 to 4 injecting events^{7,8}.

An adequate supply of all required injecting equipment and paraphernalia along with education and support from trained staff will serve to reduce direct sharing (of needles and syringes) and indirect sharing (of paraphernalia) among PWIDs. This in turn may reduce the incidence and prevalence of blood borne virus (BBV's) including hepatitis B, hepatitis C and HIV (see chapter 5), as well as other risks such as injecting site infections and vein damage.

The adequate supply of sterile acidifiers such as citric acid or vitamin C (ascorbic acid) for those injecting opioids (specifically brown heroin) will reduce the need for these service users to use alternatives such as vinegar or lemon juice. Lemon juice can carry fungal infections, which, when injected, can affect the heart (endocarditis) and cause candidal endopthalmitis, an infection of the eyes that can lead to blindness^{9,10}.

There are numerous factors that potentiate the risk of injection site damage and/or infection among injecting drug users such as environment, individual's skill at carrying out the process from preparation to administration, the substance being injected and any contaminants within it, access to and possession of sufficient amounts of appropriate sterile/unused equipment^{1,3,5,11-13}.

When people are first initiated into injecting it is often as a result of a friend or partner injecting them or by witnessing others who already inject and go on to copy their technique¹⁴⁻¹⁵. The use of peer education and education in route transition interventions can support the prevention of initiation into injecting, safer practices for those who already inject, and promote alternative modes of ingestion¹⁶⁻¹⁷.

Femoral injecting (Groin injecting)

There are a number of additional hazards associated with femoral groin injecting, they include deep vein thrombosis (DVT) where a blood clot is formed in the deep vein, pulmonary embolism — when a blood clot moves and causes a blockage in the blood supply to the lung. The risks and potentially fatal outcomes of these conditions are often exacerbated by the fact that symptoms may not be associated with the actual injection site. Clots, DVT's or vein damage can restrict the flow of blood through the femoral vein which can reduce the body's capacity to heal conditions such as ulcers or abscesses^{3,18}.

Neck Injecting

Because of the anatomy of the neck there are a number of increased risks when injecting here as the nerves, arteries and veins are in close proximity to each other. An infection or abscess might have an impact on breathing. There is evidence to

support that neck injecting has resulted in vocal cord paralysis. It is difficult for a person to inject themselves as the vein in the neck will be unsighted. This often means the PWID will attempt to access a vein by looking at a reflection in a mirror or enlisting someone else to administer the injection, which can increase the risks to the individual. Neck injecting should be actively discouraged and clients should be given advice about alternative sites or methods for ingestion^{3,19}.

Injecting - intramuscular and subcutaneous

Intramuscular injection is the route utilised for all those injecting oil or water based steroids. Subcutaneous injection is the route used for injecting other hormones and peptides (human growth hormone, melanotan etc) by those using performance and image enhancing drugs. In addition, those injecting illicit substances including heroin may also inject subcutaneously ('skin popping') if they are experiencing difficulty in accessing veins.

These methods of injection increase the risk of site infection as the process allows deposits to form within the muscle or tissue and offers an ideal environment for bacteria to multiply and develop²⁰⁻²².

Risks:

Sharing equipment

Although there is evidence to show a decline in the number of PWIDs sharing injecting equipment in recent years, there are still about one fifth of PWIDs who self reported direct sharing^{1,2,7,11,23}.

PWIDs may recognise the risks associated with sharing needles and syringes (direct sharing) but are not aware of the potential risks when sharing paraphernalia such as spoons, filters, water (indirect sharing) or straws, pipes for those using alternatives to injecting. NSP's can support the reduction of sharing injecting equipment by not limiting the amount of equipment supplied to the client and by providing equipment that can be uniquely identified by the client.

Poor equipment choice/availability

"The needle should be long enough to reach the site, strong enough to carry out the task and as small as possible to reduce damage to the injection site" 5.6,24-28.

Using a needle that is too long or thick increases the risk of damage to the vein and increases the potential for 'missed hits' where the needle penetrates a vein and exits the opposite side into the surrounding soft tissue. The wrong barrel choice can lead to the substance being forced out under excess pressure causing damage to the vein.

Flushing

Flushing refers to the practice of repeatedly pushing down and drawing back of the syringe plunger. This practice results from the belief that it ensures all of the substance gets into the body. The reality is that it doesn't 'improve the hit' but it does add extra pressure onto the vein structure and can cause an increase in turbulence within the vein leading to damage^{5,21}.

Licking the needle

After drawing up the substance the PWIDs may attempt to expel any air bubbles in the syringe by pointing the needle and syringe up, flick the side of the syringe to push air bubbles to the tip and then gently push the plunger to force the air out of the needle. This can result in a small amount of the fluid running down the outside of the needle. PWIDs may opt to lick the substance off the needle. This action can introduce bacteria from the mouth onto the needle that is about to be used to access the vein and potentiates the risk of developing a site infection.

Back or front loading

When a batch of drug is prepared for use by more than one injector a common method used to divide it up is to draw the substance into one syringe and then remove the needle or plunger from the other syringes and inject a measured amount from the original syringe. If any of the injecting equipment has been used previously this introduces the risk of bacterial infection or blood traces may be present resulting in the risk of transmission of blood borne viruses^{29,30}.

Reusing equipment

Equipment that is re-used, particularly if it has been stored for a while prior to re-use, has the potential to develop bacteria which can then be directly introduced to the injection site. Storing equipment can also increase the risk of accidental sharing. Modern needles are designed for single use and blunt after first use thereby increasing the damage to skin and veins when re-used (see appendix 1).

NSP's can support the reduction in the practice of re-using injecting equipment by ensuring a range of equipment is available in sufficient quantities from a range of outlets including NSP bases, pharmacies, mobile/outreach and vending machines over a significant period in any 24 hours in line with best practice guidance²⁻⁷.

Specific drug related harms/poly-drug use

Whilst it is not possible within the remit of this guidance to highlight all of the physiological and psychological harms associated with the range of both licit and illicit drugs and alcohol, services should ensure that all staff are aware of and are up to date with new evidence on the harms related to specific drugs e.g. ulcerative cystitis or "ketamine bladder" a condition which results in a thickening of the bladder wall, symptoms include increased frequency in passing urine, dysuria (pain when passing urine) and blood in the urine. Other potential risks with ketamine abuse include renal damage which in severe cases can be irreversible and lead to the individual left dependant on dialysis so early diagnosis is paramount³¹⁻³³.

Opiates and alcohol

Opiates and alcohol both act as depressants on the central nervous system, i.e. they can reduce blood pressure, heart rate and respiratory function. Taking opiates in combination with alcohol increases the risk of fatal/non fatal poisoning. This risk will be further exacerbated if the individual is also using licit or illicit benzodiazepines³⁴.

Cocaine and Alcohol

When cocaine and alcohol become mixed in the body it produces a third psychoactive substance called Cocaethylene, which stays in the body for longer than if the cocaine or alcohol are used separately. Cocaethylene can increase the risk of sudden death by 18 - 25 times compared to the rates seen if alcohol or cocaine are taken in isolation³⁵.

"Speedballing or Snowballing"

The practice referred to as speedballing or snowballing is when heroin and cocaine are mixed together and administered (usually intravenously) as a single preparation. The physical effects of the cocaine (a stimulant) include an increase in the heart rate. As the cocaine affect begins to wear off the heroin (a depressant) can have the effect of rapidly reducing the heart rate. This rapid change in heart increases the risk of fatal or non fatal poisoning³⁶.

Other modes of drug use

Snorting (insufflation)

Whilst snorting a drug represents less direct risk of infection to the individual, it is not without risks, particularly when snorting stimulants which are extremely corrosive to soft tissue. Snorting drugs including cocaine, amphetamine, mephedrone, Ritalin and other drugs can lead to nose bleeds, reduction or cessation of sense of smell or chronic runny nose. The membrane between the nostrils (septum) can become damaged or destroyed³⁷⁻³⁸. Perforation of the nasal septum can occur through injury to the nasal mucosa following nasal insufflation.

If nasal damage is present, small amounts of blood may be retained on the snorting equipment. If this equipment is then used by another individual with nasal damage, blood to blood contact is achieved. Harm reduction advice should include the following messages:

- If snorting always use clean devices.
- Use your own device (snorter) and do not share as there may be traces of blood on your equipment.
- Snort high up in the nostril to avoid the most sensitive soft tissue. Clean out nasal passages well after use, with damp tissue or earbud.
- Alternate nostrils to lessen damage to one side.
- If your nose is bleeding give it a rest.

Smoking

Smoking drugs, e.g. heroin (Chasing) as an alternative to injecting, can reduce the risk of fatal or non fatal poisoning (overdose) and the risk of contracting blood borne viruses. Areas that have introduced access to foil have noted a reduction in the number of injecting episodes with individual injectors³⁹ as well as offering an opportunity to engage with people who have not initiated injecting drug use.

Smoking, however, increases the potential for obstructive lung diseases such as asthma, bronchitis and chronic pulmonary obstructive disease. Drug users are often more vulnerable to these problems as a result of poor general health, diet,

compromised immune system or using homemade pipes/smoking equipment. The risks of developing respiratory problems are increased in tobacco smokers^{40,41}.

Smoking equipment, e.g. pipes should not be shared. For example, the use of crack pipes can lead to dry, cracked lips and fingers which can result in bleeding. As crack cocaine is often smoked in a social setting, smoking equipment may be passed around several people, this offers a potential route for transmission of BBV infection. Although at present NSP's are unable to provide pipes staff should be able to offer harm reduction advice on their use and encourage all those smoking drugs to use their own equipment. Harm reduction advice should include the following messages:

- When chasing, use foil provided by NSP services if possible. If not, use tinfoil. Do not use foil from sweet packaging as it is often covered with contaminants.
- If using cocaine or other substances in cigarettes or joints use unbleached card to make filters to avoid breathing in harmful substances from the card.
- Pipe users should switch from using plastic bottles or cans to using quality glass pipes to avoid inhaling ash, paint, dust, water and other particles into the lungs.

Swallowing/bombing

Many drugs, particularly stimulants, are caustic and as such have the capacity to corrode soft tissues. This may result in damage of the lining of the throat, oesophagus and stomach. Prescription central nervous stimulants such as dexamphetamine can cause gastro intestinal symptoms⁴². It is therefore reasonable to assume that when using non pharmaceutical stimulants, where sterility is not present and the substance will often be mixed with unknown adulterants and bulking agents, the risks are increased.

Rectal administration - UYB (up your bum)

The UYB route transition campaign was specifically designed for use by existing injecting drug users as an alternative and less risky route. This process involves preparing your injectable substance in the usual way and inserting the syringe, minus the needle, into the rectum to administer the drug. In the case of opioid injectors, there is concern that the use of the acidifier, such as vit c or citric, has the potential to cause damage to the tissue surrounding the anus^{43,44}. Staff should be able to discuss the UYB process with PWIDs and to advice about the use /overuse of acidifier.

Recommendations

Area Planning Boards, Commissioners and Local health Boards should ensure specialist substance misuse services, NSP's and pharmacy NSP staff receive formal accredited training to include: safer injecting practices and other routes of ingestion, prevention/identification of injection site infections, substance misuse awareness (including new psychoactive substances), reducing fatal and non fatal poisonings. Regular refresher training should also be provided.

- Specialist substance misuse services and NSP's should have in place local strategies to ensure engagement with all PWIDs including the most vulnerable groups such as those who inject crack, groin/neck injectors, the homeless, female injectors, young people and those at risk of initiation into injecting. This may best be achieved via assertive outreach.
- Clear care pathways should be in place for timely referral to specialists such as substance misuse treatment services, wound management services, primary care, blood borne virus testing and treatment services.
- Specialist substance misuse services and NSP's promote and support the development of peer-led safer injecting training and promotion of alternatives to injecting.
- NSP staff should undertake regular assessments with service users in order to discuss the individual's ongoing risks including injecting technique, substances used, BBV status, infections and overdose history. All changes to risk behaviour and onward referrals should be recorded on the individuals record on the Harm Reduction Database.

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Chapter 4 – Wound management

Background

People who inject drugs (PWIDs) are at risk from a variety of infections and health risks associated with the injecting process, from localised bacterial infections causing abscesses and sores, to systemic illnesses and life threatening conditions¹⁻⁵. This includes those who inject opioids, stimulants, steroids, image enhancing drugs and other licit or illicit psychoactive substances. Treatment for the range of conditions can vary from a course of antibiotics, wound cleansing and dressings to hospitalisation, surgery and long term treatment⁶⁻¹¹.

Self-report data indicates that, per annum, a third of all PWIDs suffer an abscess, sore or open wound at a cost of some £47 million to the NHS 12 . Higher rates are reported in higher risk groups including homeless and crack injectors. The cost to the NHS of treatment for injecting related infections is estimated to be £67 – £86 per PWID attending Emergency Departments and £247 – £370 per day for hospital admission 12 .

Specialist substance misuse services, NSP's and other agencies working with PWID's, including outreach and homelessness services, should ensure regular engagement and discussion with individuals potentially affected by site wounds or infections. There are existing specialised services to manage wounds, such as tissue viability, Emergency Departments and primary care.

For PWIDs who are perhaps new to the area, not registered with a GP, have difficulty getting to services because of finance, accessibility or because they have had previous poor experience within these services there is often a delay or reluctance to attend. It is vital therefore that agencies working with PWIDs not only offer support and advice on prevention and identification of potential wounds or site infections, but also support to facilitate access to wound care services. There is evidence to suggest that assessment and diagnosis of injecting site infections in PWIDs often occurs some time after initial onset due to reluctance on the part of the individual to seek medical attention¹³⁻¹⁶.

Evidence from 500 current or recently past injecting drug users in Wales indicated that 11% were not registered with a GP, 28% had not informed their GP of any drug use. Of the sample, 43% (n=214) reported suffering from an injecting related problem, of which 32% had not sought medical intervention¹⁷.

Although infections can occur as a result of the substance or contaminates within it, they are often potentiated by poor personal or environmental hygiene and/or a poor technique adopted by the PWID. By engaging with PWIDs who present with potential infections there is an opportunity to engage and explore injecting practices. This can support the reduction of future risk and potential conditions that may be less obvious such as endocarditis, tetanus, and wound botulism.

Evidence

Injecting site damage

Injecting site damage may occur due to:

- Scarring when a needle scratches the inside of the vein wall it can cause scarring which can lead to a build up of clots on the internal wall, as the clots build the vein becomes narrower restricting blood flow, and can lead to complete blockage and collapse of the vein.
- Phlebitis an irritation of the vein wall caused by over use of acidifier or contaminants contained within the substance, injecting irritant substances or by repeatedly drawing and depressing the plunger after accessing a vein ("flushing").
- Deep Vein Thrombosis (DVT) when a clot forms in the vein causing pain and swelling of the limb, the clot can also become dislodged and end up in the lung causing pulmonary embolism this is primarily associated with femoral (groin) injectors^{18,19}.

A hospital episode statistics study conducted by the UK Department of Health between 1997 and 2004 showed a significant increase in the number of PWIDs who attended hospital with a diagnosis of phlebitis, cutaneous abscess or cellulites²⁰.

Infections, abscesses and sores

Bacterial infections among injecting drug users range from localised injection site infections through to invasive disease, and include: Staphylococcus aurous (including community-associated MRSA); severe group A streptococci; wound botulism and tetanus¹⁻⁹. Severity can vary from relatively minor localised skin infections that can be treated successfully with antibiotics and appropriate dressings, to complicated and aggressive infections or complications which can result in amputation of a limb. There have also been examples of severe infections such as botulism, fasciitis that have lead to the death of PWIDs, as well as occasional outbreaks that affect higher numbers in a local area most notably the recent anthrax outbreak in Scotland in 2009 which resulted in 47 confirmed cases and 13 deaths as a consequence of contaminated heroin¹⁸.

With a good injection technique and appropriate equipment and environment the risk of infection can be dramatically reduced^{1-9,21-24}. However, when infection does occur, early intervention will afford the best prognosis for the PWIDs and potential cost savings to the health service not just for localised infection but also with blood borne virus infection²⁵⁻²⁷. PWID's may feel isolated and marginalised by society and often have a history of poor experiences with health professionals. This may result in a lack of confidence or unwillingness to attend health care services such as primary care, PWIDs may also face difficulties attending these services due to a lack of finance or transport or they may not be aware of services available in their area^{14,28-30}.

The provision of early intervention and wound management benefits by prevention of self incision of wounds or draining of abscesses by the individual leading to greater damage and by reducing the severity of an infection and the resultant need for more aggressive and expensive interventions including hospital admission^{11,12,30-33}.

Recommendations

- ▶ The establishment of a health and wellbeing clinic within each local health board area (where they do not currently exist). This may be achieved via multi-disciplinary service provision to include primary care, homelessness, sexual health and other relevant health service providers. The facility should be open access and available regardless of the substance/s used by an individual or whether the individual is accessing drug or alcohol treatment. The clinic should provide, where appropriate: early identification of infection; vaccination and immunisations; oral and sexual health needs assessments; support, signposting and onward referral pathways to more specialist services as required.
- Specialist substance misuse services including NSP's should ensure suitable accredited training is provided for staff working with individuals at risk of infections. This should include training on safer injecting practices, prevention/identification of injection site and soft tissue damage or infections.
- Support Primary care practitioners, including practice nurses, to undertake substance misuse awareness training including complications associated with injecting and other modes of drug use.
- Ensure that information and advice, both written and oral, is available to all those accessing NSP's and substance misuse services regarding early identification of injection site infections and potential complications, and clear guidance on action to take.

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Chapter 5 – Blood borne viruses: Prevention, testing and treatment

Background

Blood borne viruses, in this context, refer to hepatitis B, hepatitis C. HIV is considered primarily to be sexually transmitted and is addressed in Chapter 2. Hepatitis B (HBV) and hepatitis C (HCV) are viruses that spread from person to person by contact with infected blood and other body fluids containing blood. Hepatitis viruses primarily affect the liver and therefore intake of alcohol has implications for disease progression in infected individuals. HCV and HBV can cause serious disease and even death, yet are treatable and preventable.

Blood borne viral hepatitis infection presents a major challenge to health service planners and providers in Wales. In response to this challenge the Welsh Government Blood Borne Viral Hepatitis Action Plan¹ was developed and is available at: Welsh Government | Blood borne viral hepatitis action plan for Wales 2010 - 2015.

Hepatitis C

Of those exposed to hepatitis C infection, around 20% will naturally clear the virus and the remaining 80% will become chronically infected. There are estimated to be 12,000 to 14,000 people in Wales chronically infected with HCV, the majority of whom remain unaware of their infection. Injecting drug use, or rather the sharing of injecting equipment, represents the greatest risk factor in ongoing transmission. Where risk factor has been recorded, 93.6% of those diagnosed with chronic HCV infection indicated injecting drug use as the transmission route². The prevalence of HCV infection amongst current injecting drug users in Wales remains relatively low in comparison to other areas of the UK, with estimates of 26%, meaning that one in four are infected, however, this rate rises to around 40% in the main cities of Cardiff and Swansea³.

From research in Wales and the UK^{3,4} it is evident that among this high risk group:

- Homelessness is contributing to the risk of infection
- Infection occurs frequently in the first few years of injecting
- The majority of infection is undiagnosed; at least two thirds of injecting drug users with HCV infection in Wales were unaware of their disease status²
- History of prison incarceration is associated with infection. In Wales, of those HCV positive, 70% had a history of prison incarceration
- The majority of individuals with HCV are untreated.

Whilst there is no vaccination to prevent infection with hepatitis C, effective treatment is available. Funding has been provided from Welsh Government to each Health Board to facilitate testing, diagnosis and treatment of hepatitis B and hepatitis C within substance misuse services as part of the Action Plan.

Hepatitis B HBV infection is also common in this group of ex and current injecting drug users, however, ethnic minority groups, men who have sex with men (MSM), sex workers and incarcerated individuals are also at elevated risk. Historically small numbers of individuals are known to have been exposed via contaminated blood products and nosocomial infections. The risk of developing chronic hepatitis B infection depends on the age at which infection is acquired¹. About 5% or less of previously healthy people, infected as adults, become chronically infected⁵. The risk is increased in those whose immunity is impaired.

However, an effective vaccination is available to prevent infection with hepatitis B although HBV vaccination coverage is poor among many risk groups. Even when administered, it is important that the vaccination does not result in a relaxation of harm reduction measures including safer sex practices/condom use and NSP provision. Around 10 to 15% of adults fail to respond to three doses of vaccine or respond poorly. Poor responses are mostly associated with age over 40 years, obesity and smoking⁶. Lower seroconversion rates have also been reported in alcohol dependent individuals, particularly those with advanced liver disease⁷. Where testing for markers of current or past infection is clinically indicated, this should be done at the same time as the administration of the first dose. Vaccination should not be delayed while waiting for results of the tests.

Currently within Wales and England only acute HBV infection is recorded so no estimates exist for chronic infection of HBV within Wales. However, within some groups HBV infection is relatively common, particularly amongst ethnic minority groups originating from high prevalence countries (South East Asia, Africa, the Middle and Far East, Southern and Eastern Europe)¹.

Evidence

Ongoing transmission of BBV infection occurs due to continued high risk behaviour, particularly sharing of injecting equipment, both direct (needles and syringes) and indirect (injecting paraphernalia) and unprotected sex.

An effective response to blood borne virus infection must have three key aims:

- prevention of further infection
- diagnosis of infection
- treatment or management of infection.

Recommendations

Prevention of infection

- Provide hepatitis B vaccination to all those indicated in the Green Book Immunisation against infectious diseases⁸. Specifically in the context of this document:
 - injecting drug users (IDUs) IDUs are a group at particular risk of acquiring hepatitis B infection. Vaccination is recommended for the following:
 - all current IDUs, as a high priority
 - those who inject intermittently

- those who are likely to progress to injecting, for example those who are currently smoking heroin and/or crack cocaine, and heavily dependent amphetamine users
- non-injecting users who are living with current injectors
- sexual partners of injecting users
- children of injectors
- Those who change sexual partners frequently, particularly MSM and male and female commercial sex workers.
- inmates of custodial institutions. Immunisation against hepatitis B is recommended for all sentenced prisoners and all new inmates entering prison in the UK.
- individuals at occupational risk including those working in substance misuse services, particularly those working in NSP services and in homelessness/residential environments.
- Ensure provision of high quality, accessible NSP services in line with NICE guidance⁹ and service framework for NSP services in Wales¹⁰. Ensure all relevant staff are fully trained and competent to deliver high quality information and advice regarding BBV prevention messages including safer injecting, hepatitis B vaccination provision/referral to appropriate services for testing and treatment.
- Encourage the development of peer-led harm reduction interventions amongst injecting drug user cohorts promoting a reduction in the sharing of injecting equipment and preventing the onward transmission of BBVs.

Diagnosis of infection

- Ensure the availability of BBV testing, including protocols for onward referral for testing and vaccination, within all substance misuse services:
 - Venepuncture (blood sample) provides the best means of testing for BBVs (hepatitis B, hepatitis C and HIV) and should be routinely available either onsite or via referral to local CD(A)T services with appropriate clinical staff
 - Dried blood spot (DBS) testing provides a low threshold and less invasive mechanism for testing for BBVs including HIV. For individuals who are unwilling or unable to readily provide a venepuncture sample (e.g. due to poor vein access), DBS testing provides an effective alternative. Research indicates a six fold increase in testing by DBS when compared to venepuncture¹¹. (Craine et al, 2008). DBS testing may be undertaken by non-clinical but suitably trained staff.
- Ensure appropriate pre and post test discussion to ensure that appropriate harm reduction messages may be delivered in the case of both positive and negative results.
- Ensure that service users are offered routine BBV testing on at least an annual basis¹ – particularly in high risk groups including those currently injecting drugs.

Treatment or management of infection

- Following diagnosis and confirmatory testing for hepatitis B, hepatitis C and/ or HIV, a referral to specialist services should be offered to the individual. Clear referral pathways should be in place.
- Where possible, and if clinically indicated, treatment should be supported by the substance misuse service being accessed by the individual to ensure ongoing support with established keyworkers/support staff within the service.
- ▶ The Blood borne viral hepatitis Action plan¹ clearly describes the development of a local network of clinical and support staff to facilitate continuity of care and maximise the benefits of existing supportive relationships within substance misuse services. This has been shown to be important in a number of ways, including:
 - Treatment initiation and adherence has been shown to benefit if existing supportive relationships can be maintained, particularly by those accessing substance misuse services¹².
 - As the hepatitis virus attacks the liver, psychosocial and other support for reducing alcohol consumption and/or ongoing drug use provide effective harm reduction interventions.
- Substance misuse services should ensure ongoing support to individual regardless of outcome of treatment. Treatment efficacy for hepatitis C infection is dependent on the genotype and pre-existing health issues of a given individual. Treatment may not be successful in all cases and therefore ongoing management of an infected individual may be required. Substance misuse services have a role in the ongoing support and care of the individual, particularly in reducing the impact of the disease on their physical health e.g. support in addressing issues of problematic alcohol use and diet.

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Chapter 6 - Reducing fatal and non-fatal poisonings

Background

The Office of National Statistics defines deaths related to drug misuse as: '(a) death where the underlying cause is drug abuse or drug dependence or (b) where any of the substances controlled under the Misuse of Drugs Act (1971) are involved.' In 2011, a total of 1,605 deaths related to drug misuse were recorded in England and Wales, of which 137 drug-related deaths were recorded in Wales¹ representing an decrease of 9.9% on the 152 drug-related deaths recorded in the previous year. The number of these deaths is highest in male heroin users aged 40 to 44 years². This group is increasingly vulnerable to the adverse effects of risky drug-taking behaviours, including overdose³.

Sudden onset (acute) drug-related deaths and 'near misses' caused directly by the consumption of one or more drugs are referred to as fatal and near-fatal poisonings or overdoses.

Fatal and non-fatal poisonings are often associated with co-ingestion of multiple substances (poly-substance use). Co-ingestion of multiple substances, especially central nervous system depressants such as opioids, alcohol and benzodiazepines contributes to a substantial proportion of these deaths⁴.

Fatal poisoning is particularly noted among opioid users with reduced tolerance. Resuming opioid use following a period of abstinence is an important risk factor for opioid overdose. During periods of abstinence tolerance to opioids is lost. Individuals are particularly vulnerable in the transitional periods of their opioid drug using career, for example; after detoxification treatment, release from prison, exiting drug treatment (especially unplanned exits) or leaving residential treatment⁵.

'Working together to reduce harm: the substance misuse strategy for Wales 2008-2018' includes an objective to take forward actions which focus on reducing the number of drug-related deaths and near fatal drug poisonings⁶. Actions already taken are included in the relevant sections of this chapter.

Evidence

Emergency responses

Most opioid overdoses happen in the presence of a witness and often in the user's own home⁷⁻⁹. Prompt response is essential to avoid respiratory depression and death¹⁰. Evidence indicates that witnesses present at an overdose event are willing to intervene and seek help^{11,12}. Inappropriate or untimely action by witnesses may occur if there is a lack of knowledge, difficulty in identifying an overdose situation, and/or fear of unwanted police attention¹³⁻¹⁷. Training opioid users and their significant others in overdose prevention, recognition and response, including the administration of naloxone, can help to achieve effective action^{10,18,19}.

Liaison between police and ambulance services aimed at the safe calling of ambulances has been advocated as part of any planned intervention for overdose incidents²⁰. Some UK police force areas have been involved in developing protocols regarding police attendance at overdose incidents²⁰.

Beyond the immediate emergency response

It has been estimated that there are 20 to 25 non-fatal overdoses for each drug-related death²¹. Evidence indicates that the majority of opioid users (typically 50 - 60%) have survived an overdose, and that 8 to 12 % had an overdose in the last 6 months, with some drug users having overdosed more than once²¹.

Those who have survived an overdose are at greater risk of fatal overdose later on²². In addition, non-fatal overdoses can cause a wide range of health problems^{3,22}. Overall, these health problems are likely to be greater in older, more experienced and dependant users²³.

Individuals who have overdosed commonly attend accident and emergency departments and are often admitted to acute hospital beds. Opportunistic interventions beyond the immediate emergency response could help these individuals to engage or re-engage with local harm reduction and/or treatment services as well as to learn how to avoid future overdose incidents^{24,25}.

The contact that ambulance and emergency department staff have with the patient and witnesses at overdose incidents presents an opportunity to offer information on overdose prevention and signposting/referral to local harm reduction/substance misuse treatment services as appropriate²¹. Service developments have included distribution of such information by these staff as leaflets/packs.

Periods of hospitalisation can provide an opportunity for appropriate interventions to be targeted at those who are at high risk of drug-related death 23 . Specialist staff may be necessary to support such service development. A hospital-based specialist nurse-led liaison service may be able to fulfil such a role 23 . Specialist nurses within emergency departments have been introduced in some areas in the UK 20 .

Information packs have been produced which include information on overdose awareness, the take-home naloxone scheme in Wales, and contact details for local harm reduction and substance misuse treatment services. Packs are distributed through ambulance, emergency departments, prison, harm reduction and substance misuse treatment services. The intervention is aimed at at-risk opioid users and their significant others, especially following emergency treatment by ambulance and emergency department staff for a near-fatal overdose. It is also a resource for these staff to signpost or refer individuals they treat for near-fatal overdose to further support and treatment as appropriate.

Take-home naloxone

Naloxone has been used in the emergency treatment of suspected overdose for many years to rapidly reverse the effects of opioids, including respiratory depression. The wider distribution of naloxone through 'take home' schemes for users and those close to them has a much shorter history in the UK.

Studies of take-home naloxone schemes typically involve integrated training with provision of naloxone kits to opioid users for emergency use, usually by intramuscular injection^{18,19,26}. Timely administration of naloxone by users and their significant others, whilst waiting for the arrival of emergency services,

can be effective in helping to prevent opioid-related deaths^{18,19}. A take-home naloxone scheme has been implemented across Wales following evaluation of a demonstration pilot¹⁸.

Opioid Substitution Treatment

Opioid Substitution Treatment (OST) significantly reduces the mortality risk of opioid users²⁷⁻²⁹, although risks related to drug tolerance increase on entering or leaving OST^{28,30,31}. Survival benefits may increase with cumulative exposure to OST²⁸. The risk of drug-related death increases substantially on relapse after treatment or in the weeks after release from prison³².

Increasing the proportion of drug users in treatment, especially the proportion of heroin users in OST, has the potential to prevent drug-related deaths. Reaching out to untreated populations of drug users to bring them into contact with harm reduction services is important for risk education and management, and to support them in accessing appropriate services including substance misuse treatment²¹.

Improving engagement and retention of drug users in treatment is likely to improve their likelihood of accruing the full benefits of treatment, achieve the goals of their care plan, complete treatment in a planned way and be successfully discharged from drug treatment services³³. Research studies show that a range of interventions can help to engage and retain individuals in treatment³³.

Supervised self-administered of OST has an important role in helping to achieve adherence with care plans and reduce risk of diversion. Declines in the number of methadone-related deaths in Scotland and England were closely related Introduction of supervised self-administration of methadone³⁴. The declines occurred despite substantial increases in methadone prescribing in both countries during the same time periods.

Research indicates that as drug users grow older they may face a progressive disease burden which means that they are more susceptible to fatal and non-fatal overdose^{3,35}. Thus, regular health screening and liver function tests have been advocated²⁰.

Suicide rates are high among injecting drug users³⁶. Drug users with a history of depression are particularly vulnerable³⁶. Carrying out suicide risk assessments as part of routine assessments for individuals seeking OST treatment has been advocated²⁰.

UK clinical guidelines on the management of drug misuse include good practice to help prevent fatal and near-fatal overdose³⁷.

Supervised drug consumption rooms/safe injecting facilities

Supervised drug consumption rooms have been established in several non UK countries, mostly in big cities where serious health and public order problems have been associated with drug misuse, especially injecting in public places²¹.

Evidence indicates that those who inject in public places may be at increased risk of overdose³⁶. Injecting in public places is more likely among the homeless and particularly marginalised populations³⁶. Inherent risks for homeless drug users may vary according to their social networks and accommodation³⁶.

Supervised drug consumption rooms enable rapid intervention at the first signs of an overdose and may help reduce drug-related deaths^{21,38}. Prompt provision of effective interventions in these facilities can also help to reduce the impact of non-fatal overdose³⁹.

Information and education for drug users and significant others

Provision of information and education to drug users and their significant others is used as an intervention to reduce drug-related deaths⁴⁰. Education on the risks of overdose; particularly risks due to poly-drug use, loss of tolerance and injecting alone, may help prevent fatal and non-fatal overdose⁴¹. This is particularly relevant for drug users who are older or are due to be released from prison.

Evidence indicates that overdose prevention messages need to be appropriately constructed and address different aspects of risk behaviour³⁶. Repeated exposure is most likely to result in behavioural change³⁶. The message to reduce injecting should be emphasised³⁶.

Welsh Government supports Wales' annual overdose awareness day (13 December) to acknowledge individual loss, and raise awareness of overdose prevention and effective action in an emergency⁴².

Information and education for harm reduction, substance misuse treatment service and health practitioners

Provision of information and education to those who work with drug users and their significant others may allow for further cascading of information to those most at risk of acute drug-related deaths⁴⁰. Training harm reduction workers on the risk factors, prevention and management of overdose and significant others may help prevent fatal and non-fatal overdose²⁰.

A recent review of the evidence recommended raising awareness among prescribers of the dangers of multiple prescriptions, in particular of antidepressants, for individuals on OST²⁰. Measures to prevent multiple prescriptions for psychoactive medicines to individuals prescribed OST have the potential to reduce emergencies, particularly those involving the use of benzodiazepines²⁰. Recent research aimed at identifying the nature and scope of benzodiazepine and 'Z' drugs prescribing in Wales⁴³ resulted in the publication of an educational pack designed to support the appropriate prescribing of hypnotics and anxiolytics across Wales⁴⁴.

Data collection and monitoring trends

The relative lack of UK data on fatal and non-fatal drug-related poisonings is considered a significant weakness in the evidence-base²⁰. Ambulance data may be effectively been used to identify overdose clusters, those repeatedly overdosing and to map out high risk areas in some countries²¹. This data has also been used to offer help to those not in contact with drug services²¹. However, this excludes data on fatal and non-fatal poisoning incidents where the ambulance service is not contacted. Elsewhere, effective data collection systems are being developed. For example, in the Netherlands, a monitoring system for drug-related acute health incidents was tested in 2009 and is now being expanded²¹.

Inter-agency working and lessons learned

A wide range of agencies have a role in the prevention drug-related deaths and near-misses. Inter-agency working can make a vital contribution to the concerted effort. Review processes can also provide an insight into local treatment practice and can help drive further improvements in that practice⁴⁵.

A National Monitoring group for Drug-Related Deaths has been established to ensure that knowledge and best practice around future prevention of drug-related deaths is widely disseminated across Wales. Reviews have led to changes in service provision including flexible opening and targeted support for high-risk individuals such as newly released prisoners.

Multiple interventions

Research into the circumstances of fatal and non-fatal overdoses has supported the development of interventions that target high-risk situations or high-risk individuals^{21,39}. Overall, the evidence strongly indicates that a significant reduction in fatal and non-fatal drug overdoses will only be achieved by the implementation of a range of interventions that can target different aspects of the associated risk behaviours^{20,21,36}. Overdose prevention and management needs to form part of a comprehensive approach which includes measures to address drug users' wider health and social problems³⁶.

Recommendations

- Ensure ready access to training and prescription of naloxone to all relevant individuals (opioid users, their families, partners or carers (including housing staff) and those at risk leaving institutions e.g. prison, rehab).
- Each substance misuse service to ensure the provision of assertive outreach workers to:
 - Target those not currently engaged with services and at risk of drug related death and other substance misuse health complications in the community
 - Co-ordinate the establishment of local multi-disciplinary drug related death response groups. These local groups should provide a timely response following a drug related death establishing the circumstances of death, identify individuals requiring support and recording and disseminating lessons learnt to prevent further avoidable deaths.
- Allocation of the role of a dedicated substance misuse liaison nurses within emergency departments (where they do not currently exist) and ensure that emergency department staff consistently offer those treated for a near-fatal overdose, particularly to repeat-overdose patients:
 - information on overdose prevention and management, and
 - signposting/referral to harm reduction or substance misuse treatment services as appropriate
- Ensure continuity of care for released prisoners through community-based harm reduction or substance misuse treatment/criminal justice services as appropriate.

- Protocols must be in place to ensure prompt onward referral to psychosocial/bereavement support services appropriate to families, peers and significant others including witnesses following a fatal or near fatal overdose and to those who have experienced a near-fatal overdose.
- Ensure access to safe storage for prescribed OST where patients live in supported housing or in accommodation where children live or visit regularly.

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Chapter 7 - Targeting especially vulnerable groups

Background

The definition of vulnerable groups varies but the following groups have been considered here:

- Asylum seekers and refugees
- Black and minority ethnic groups
- Children and young people in care
- Gypsies and Travellers
- Homeless people
- Migrants
- People with learning disabilities
- People with mental health problems
- Older people
- Veterans.

Clearly these groups are not mutually exclusive and there will be considerable overlap between them. The literature search that underpins this document included all these groups; for some no specific information or evidence was found.

Evidence

Asylum seekers and refugees

Asylum seekers are those who are in the process of applying for refugee status. Unlike refugees they are not allowed to work and must rely on the state for housing and money for essential items. There is a lack of reliable data on the prevalence of drug use amongst asylum seekers and refugees as they are likely to be very reluctant to admit to any involvement with drugs¹.

Asylum seekers and refugees rarely access drug services; barriers include lack of awareness, fear of the authorities and stigma¹. Language and communication may also be an issue for this population. NHS staff may not be aware of the rights and entitlements of asylum seekers and refugees to primary and secondary care¹.

Heroin use may be an issue amongst young asylum seekers from Sierra Leone. Khat use is common in the Somali community, however, there is a lack of understanding of its health implications amongst those who use it and those planning and providing services¹.

Black and minority ethnic groups (BME)

Intravenous drug use is lower amongst minority ethnic groups than in the white population and patterns of use differ. Asian users are more likely than those in the white community to smoke heroin than to inject². In some communities khat use is accepted as cultural or social recreation. There may be particularly high levels of cannabis use in some black communities. Very high levels of stigma attached to

drug use are present in some communities, particularly Chinese and South Asian. This may lead to levels of use being underestimated².

There is limited awareness amongst BME communities about the range and value of drug services. Language and communication may also be an issue for this population. The lack of knowledge, and a reluctance to seek help because of stigma, means that BME groups are underrepresented in services². Research suggests that black and minority ethnic drug users find treatment services less accessible than the rest of the population. This may be a particular problem in relation to south Asian communities³. Both a perceived lack of understanding of culture and occasionally racism are reported as barriers to service use².

Children and young people in care

Children and young people who are homeless, looked after by local authorities or in foster care are recognised as being at greater risk of substance misuse³. Research suggests that care leavers have higher levels of self reported drug use than the general population⁴.

The National Institute for Health and Clinical Evidence (NICE) have issued guidance on community based interventions to reduce substance misuse among vulnerable and disadvantaged children and young people⁵. Barriers to accessing services for young care leavers include denial of the problem and not knowing how or where to seek help. Multifaceted approaches that address all aspects of young people's lives, for example health, housing, training, employment and their finances are likely to be the most effective⁴. In addition, education on resisting peer pressure to use drugs and progressing on to other forms of drug use may be effective.

Zero tolerance approaches adopted by accommodation providers may result in drug misuse not being addressed. Research suggests that in this situation peer influences may lead to more harmful forms of drinking and drug use in hostel and foyer settings⁴.

Gypsies and Travellers

The social exclusion of Gypsies and Travellers puts them at risk of problematic drug and alcohol use. Recent research suggests that levels are lower than the rest of the population but are increasing⁶. Many more males than females in the Gypsy and Traveller Community use drugs but a similar proportion use alcohol. A recent study suggests that the prevalence of injecting drug use is low⁶. The health of Gypsies and Travellers tends to be poorer than that of the general population and substance misuse has a further adverse impact. Illicit drug use is taboo amongst Gypsies and Travellers and this leads to it being hidden; communities often reject drug users⁶. Research suggests that access to services for the Gypsy and Traveller Community is extremely difficult and rarely successful⁶.

Homeless people

A significant proportion of the homeless population have substance misuse problems, estimates vary but studies in London have shown that 35% of street homeless have reported drug problems and 32% alcohol problems⁷. Homeless people with substance misuse issues usually have multiple complex problems⁸. The relationship between substance misuse and homelessness is complex; evidence shows that they are mutually reinforcing⁸. Access to services is

problematic for homeless people. Access to healthcare is a particular difficulty for those with drug misuse problems. GPs have concerns about prescribing for them and practices are reluctant to register them as patients⁹.

Evidence indicates that homeless people recognise the signs of heroin overdose and many are prepared to take responsibility to give naloxone, providing prior training and support is provided¹⁰. A study on the relationship between homelessness and risk factors for heroin-related death suggested that hostel accommodation should be a priority for interventions to reduce heroin related deaths¹¹. In addition, this study recommended that drug users sleeping rough in cold climates should be made aware of the dangers of medicating with heroin when experiencing insomnia because of cold weather¹¹.

Homeless young people with mental health and/or substance use problems may benefit from case management¹², and cognitive behavioural interventions may lead to an improvement in homeless young people's mental health and in reducing substance use and risky sexual behaviour¹². It is, however, very difficult to engage this population with this type of intervention. Provision of basic facilities such as food, showers and clothing may have mental health benefits and reduce substance use among young people living on the streets¹².

Services aimed at promoting abstinence have limited success; short stay detoxification is particularly unsuccessful in the homeless population⁸. There is evidence that when services adopt harm reduction or harm minimisation policies they are able to engage homeless people more successfully. Harm reduction based floating support has been successful in getting people into tenancies and engaged with substance misuse services⁸.

Welsh Government has produced a good practice framework for provision of substance misuse services to homeless people and those with accommodation problems¹³.

People with learning disabilities

It has been estimated that 0.8% of those with mild and moderate learning disabilities have substance misuse problems although this is likely to be an underestimate since it is based on those known to services¹⁴. Recognising substance misuse in those with learning disabilities is difficult. Health and behavioural issues associated with hazardous substance misuse are likely to present particular difficulties in this population. These include increased epileptic activity, cardiovascular problems and violent and offending behaviour¹⁴. People with learning disabilities may not see their substance use as problematic and may be reluctant to disclose this¹⁵. Evidence indicates that group approaches used by mainstream addiction services may not be effective for people with a learning disability. Feedback from service users suggested that they did not like sharing their life stories with others in group treatment and some found this intimidating¹⁵.

People with mental health problems

It has been estimated that between 30 and 70% of those presenting in health and social care settings have co-existing mental health and substance use problems¹⁶. Substance use may lead to and can exacerbate symptoms of mental illness. Those with dual diagnosis tend to have poorer prognosis and greater disability¹⁶.

Evidence suggests that motivational enhancement, cognitive behaviour therapy and contingency management may be beneficial. Recovery approaches may also be useful¹⁶. Welsh Government has published a service framework to meet the needs of people with co-occurring substance misuse and mental health problems¹⁷.

Older people

Substance misuse among older people receives relatively little attention. Evidence from the Office of National Statistics Adult Psychiatric Morbidity Survey found that 3% of men and 1% of women aged between 65 and 74 and 0.5% of men aged over 75 reported alcohol dependence in the last 6 months¹⁸. Those who begin misusing substances after the age of 65 are most likely to misuse alcohol¹⁹. Prevalence of drug dependence in the past year for those aged over 65 was less than 1% for both men and women¹⁸.

It can be difficult to identify substance misuse in older people but this should be considered in older people who make frequent use of healthcare particularly emergency departments and those using mental health services¹⁹. Cognitive impairment from substance use can be overlooked, misdiagnosed or treated inappropriately in older people. Acute alcohol withdrawal syndrome is more protracted and severe in elderly people than in younger people with drinking problems of equal severity²⁰.

The evidence base for substance misuse treatment in older people is sparse but the principles of treatment in the working age population apply¹⁹. Brief intervention is cost-effective for those whose drinking meets diagnostic criteria for harmful use²⁰. Out-patient detoxification may not be appropriate for older adults who are fragile, who live alone with limited support, or who have multiple medical problems²⁰.

For alcohol misuse pharmacotherapy, there should be adjunctive psychological and social interventions. Useful psychological interventions include counselling and motivational interviewing. Self help groups for older people should be small and members should be peers²⁰.

Veterans

The most prevalent substance misuse problem among veterans is likely to be alcohol misuse. A recent study of military veterans living in Wales, found that the rate of probable alcohol dependence in those studied was no higher than that in the general population²¹. However research on health and social outcomes for UK military veterans, published in 2009, concluded that the current generation of UK military personnel (serving and ex-serving) have higher rates of heavy drinking than the general population; however, this difference may attenuate with age²². It is recognised that alcohol use and misuse play a significant role in offending behaviour amongst veterans²³.

The extent of drug misuse in the UK veteran population is unknown. The charity Combat Stress identify alcohol misuse as more typical than illicit drug misuse, although younger veterans presenting are more likely to have turned to both alcohol and illicit drugs while older veterans predominantly to alcohol alone²⁴.

A study of veterans living in Wales found that, (with the exception of the group recruited through Combat Stress), illicit drug use among the veterans surveyed, was comparable with or lower than rates in the general population²¹. Cannabis was the most frequently used substance. The proportion of the Combat Stress group dependent on cannabis (the report did not clarify how dependence was assessed) was comparable to the general population; among the other participants the proportion was lower. A greater proportion of the Combat Stress group were dependent on another drug or drugs (tranquilisers, amphetamines, cocaine, and heroin) than in the general population.

Recommendations

Asylum Seekers

- Ensure that NHS and other staff are aware of the rights and entitlements of asylum seekers and refugees to healthcare provision.
- Ensure that asylum seekers and refugees are supported to register with primary care services.
- Work with partners to ensure relevant health promotion advice/information is available in accessible formats and is culturally relevant and acceptable.

Black & Minority Ethnic Communities

- Provide education for BME communities on drug use and drug services, information needs to be provided in appropriate languages.
- Establish and promote telephone help lines where stigma is an issue.
- Provide information in non written formats for those with literacy issues.
- Engage with GPs, faith based bodies and religious leaders to provide information relating to harm reduction and specialist drug and alcohol services.
- Facilitate access to drug services for BME communities. Specialist drug services for BME communities will be unsustainable in many areas.
 Local partnerships should assess need and develop local solutions.
- Mainstream drug services should review how well they are meeting the needs of BME communities. Planning, development and training should address diversity issues.

Young People

- Provide information and advice on the harms related to substance misuse, including deaths by solvent misuse, to all young people.
- Ensure the use of screening and assessment tools (such as the Alcohol
 Use Disorders Identification Test (AUDIT)) in accident and emergency
 departments to identify young people with drug and alcohol problems who
 require referral to substance misuse services.
- Provide relevant training to leaving care teams to include the complexities of substance misuse and treatment issues.
- Provide social skills and drugs education for care leavers focussing on resisting the pressure to use drugs and progressing on to other forms of drug use.

- Accommodation providers should not adopt zero tolerance policies as this
 may preclude them from providing harm reduction advice and interventions.
 Induction into hostel or foyer accommodation should include drug
 education information.
- Child protection procedures must be followed in relation to all children until they reach 18 years. Appropriate and robust transitional arrangements must be in place for all young people with problematic substance misuse issues moving to adult services.

Gypsy and Traveller Communities

- Improve access to drug and other services and ensure outreach services for the Gypsy and Traveller Community.
- Equip those already engaged with Gypsy and Traveller Communities with the skills to identify substance misuse problems and provide information and signposting/referral to specialist services.
- Increase awareness of substance misuse and available drug and alcohol specialist services within the Gypsy and Traveller Community.
 The information should be available in a range of formats which should not be dependent on the ability to read.
- Engage and work with other services providers such as education to improve engagement and reduce stigma.

Homeless

- GPs should ensure that homeless people are able to register with them, if necessary using the surgery address.
- Provide flexible appointments to improve engagement.
- Training and education on managing and treating individuals with complex needs should be available to the NHS and partners.
- Services for homeless people should address all their needs (for example accommodation, healthcare, financial) as well as substance misuse.
 Modification of generic services may be the best option where numbers of people with a history of substance misuse are low. Services may be required long term. Case management approaches should be considered.
- Outreach, Hostel/temporary accommodation providers should be a priority for interventions and support to reduce drug misuse related deaths.
- Outreach and other services for homeless people should provide drug related information and advice, triage assessment, referral to drug treatment, brief psychosocial interventions, harm reduction interventions (including needle exchange) and aftercare.

Learning disabilities

- People with learning disabilities and substance misuse problems should be supported to access mainstream treatment and harm reduction services.
- Provide training to professionals in learning disability services with regard to substance misuse, particularly screening, treatment models and appropriate use of medication.

- Provide training to professionals working in substance misuse services with regard to effective communication and working with people with learning disabilities.
- Enable people with a learning disability to discuss their substance misuse issues in one to one settings. Group approaches may be best avoided.
- Service providers should consider developing treatment packages that involve an integrative approach between learning disability, mainstream addiction teams and other health care services.
- GPs should include screening for, and assessment of, substance misuse as part of the annual health check.

Mental Health

- Ensure robust assessment within substance misuse services using appropriate screening and assessment tools to identify any mental health issues.
- Ensure robust assessment within mental health services using appropriate screening and assessment tools to identify any substance misuse issues.
- Provide training for mental health professionals to recognise, assess and manage the risk of substance misuse. Risk management should incorporate harm reduction advice.
- Provision should be made for people with mental illness and drug and alcohol misuse as part of mainstream mental health services.

Older people

Drug and alcohol services for older people should²⁰:

- Be accessible through multiple referral routes
- Be well networked with community resources
- Have strong links with older persons mental health services
- Provide targeted information for older services users
- Have sites of consultation in primary care or general hospitals
- Improve detection and engagement in treatment
- Provide harm reduction, detoxification and maintenance treatments, psychological assessment and therapies
- Liaise with primary and secondary care to provide physical and mental healthcare
- Provide social interventions including working with relatives.

Veterans

Drug and Alcohol services for veterans should:

- Be familiar with NICE guidance on managing Post Traumatic Stress Disorder (PTSD)²⁴.
- Have a clearly documented process for managing veterans with PTSD (or other co-morbid mental disorder).

- Ensure that their assessment tools include a question asking about military service.
- Be aware of the All Wales Veterans Health and Wellbeing Service (AWVHWS) and know how to contact their local veterans therapist.
- Be aware of the voluntary sector services available to veterans and know how to contact or refer on to them.

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