

# Guidance for working with cocaine and crack users in primary care

**RCGP Drug & Alcohol Misuse Training Programme**  
**RCGP Sex, Drugs and HIV Task Group**  
**SMMGP**

1st Edition 2004



**Written by:**  
Chris Ford

**Edited by:**  
Harry Shapiro

**Guidance for working with  
cocaine and crack users  
in primary care**

Written by Chris Ford

Edited by Harry Shapiro

Available at [www.smmgp.co.uk](http://www.smmgp.co.uk)

Contributions and co-authors: Judy Bury, Tom Carnwath, Frances Davies,  
Clare Gerada, Cathie Gillies, Aidan Gray, Erin O'Mara, Matthew Southwell,  
Gary Sutton, Jez Thompson, Monique Tomlinson and Nat Wright.

Thanks to: The RCGP National Expert Advisory Group, the RCGP Drug Clinical Regional Leads,  
SMMGP Advisory Group and the Crack Squad.

Supported by: RCGP Drug Training Programme, SMMGP, RCGP Sex, Drugs & HIV Task Group,  
Conference on Crack and Cocaine (COCA), Traffasi, the Alliance and Black Poppy.

Completed September 2004  
For review 2006

# Contents

<b>Executive summary</b>	ii
<b>Introduction</b>	1
<b>The drug</b>	2
What is cocaine?	2
How is it used?	2
What are the main physical and psychological effects?	2
<b>The users</b>	4
<b>Caring for the user in the surgery</b>	4
Overview	4
First presentation	4
Assessment for first presentation	5
Examination	6
Ongoing care in the surgery	7
Treatment options in the surgery	7
<b>Sharing care outside the surgery</b>	9
Psychological interventions	9
Formal drug treatment settings	10
<b>Group specific issues</b>	12
Users of different drugs	12
Different types of user communities	13
Women, pregnancy and child protection issues	14
Cocaine and the sex industry	15
Cocaine and the criminal justice system	15
Information for patients	15
<b>Appendix 1: Cocaine and health</b>	16
<b>Appendix 2: Review health check for cocaine users</b>	19
<b>Appendix 3: Prescribing</b>	21
<b>Appendix 4: Harm reduction</b>	22
<b>Appendix 5: Developing protocols for shared care</b>	25
<b>Appendix 6: Patient information</b>	26
<b>Appendix 7: Additional reading</b>	27
<b>Appendix 8: Useful organisations and websites</b>	28
<b>References</b>	29

## Executive summary

### Introduction

- The use of cocaine in the UK has been rising steadily over the past decade. As the price has fallen, all the other indicators of use have been rising including the number of those coming forward for treatment.
- The drug comes in two main forms: cocaine hydrochloride powder which is usually snorted, but also injected – and crack, which is usually smoked, but also injected.
- Cocaine is a powerful stimulant whose effects wear off quickly, prompting the user to repeat the dose. However, those who use cocaine powder on an occasional basis are unlikely to come to serious harm or seek medical treatment. But high dose users, especially of crack, are likely to need treatment for a large range of physical and psychological problems.
- This guidance focuses particularly on crack cocaine, because it has the potential to cause the most serious problems for the individual, families and the community at large.
- This guidance is aimed at all primary care workers.
- It is important that GPs and other primary care practitioners have a working knowledge of the problems faced by crack users, while at the same time not working in isolation or outside their level of competence.
- This guidance is underpinned as far as possible by the published clinical evidence base. Where there is none, it draws on the experience of users and of staff working in the field. Users have an important role in building up the evidence base for effective interventions, as they are often very knowledgeable.
- Crack users have been especially demonised by the media, but successful treatment outcomes are possible, and usually stem from a positive and empathetic practitioner / patient relationship.

### The drug

- Cocaine is extracted from the leaves of the coca plant, which grows mainly in the mountainous regions of South America. The leaves are processed into cocaine hydrochloride powder.
- To transform cocaine into crack, the powder is heated up in a microwave with bicarbonate of soda and water. Crack is easily melted and vaporised, so can be smoked, but it can also be injected by adding an acid.
- Cocaine is most commonly snorted in its hydrochloride powder form. Crack is most commonly smoked through a pipe. This is the quickest way to get the drug to the brain. Glass pipes, tin cans or plastic water bottles are used as conduits.
- Cocaine is a stimulant drug. Users feel more alert and energetic, confident and physically strong, and frequently believe that they have enhanced mental capacities.
- When smoked as crack, it has more intense and immediate effects because in this form the drug is delivered to the brain much quicker.
- Excessive doses can cause severe medical problems, and even death, from pulmonary oedema, heart failure, myocardial infarction, cerebral haemorrhage, stroke and hyperthermia.
- The after-effects of crack use may include fatigue, depression, paranoid ideation and depersonalisation as people 'come down' from the high.
- Chronic high-dose crack use can result in some physical, and marked psychological dependence.

## Executive summary

### The users

These 'user' categories are very generalised and often overlap.

- **Recreational users** will take the drug infrequently and in small amounts at social occasions with friends. However, if use increases, they then move on to binge use.
- **Binge or problematic users** actively seek cocaine and will buy increased quantities, plan social activities to involve cocaine and establish a recognisable pattern of use, isolating themselves from others and using large quantities at one time. This pattern of use is potentially life threatening and such users often present for help.
- **Chronic high dose or dependent users** will consume as much as possible and may demonstrate a life-threatening pattern of use. Relationships and work are affected or are non-existent and there tends to be psychological and physical signs of use. These users may also present looking for help.

### Caring for the user in the surgery

#### First presentation of crack problem

- Patient may present in a medical crisis.
- Receptionists and other staff should be made aware that these users may need to be seen as an emergency. They might be experiencing the after-effects of an overdose or be agitated and confused and need calming down.
- Less acutely – they might be presenting with a specific set of symptoms such as asthma, chest pains and/or weight loss, which turn out to be a result of their crack problem.
- Patient may already have another drug problem e.g. opioid dependence, and be currently in treatment at the surgery and present with symptoms of crack use as a new problem.

#### Assessment for first presentation

- On the first visit, the patient should receive an initial assessment to identify problems and assess immediate needs. This should cover:
  - Current drug and alcohol use.
  - Method and route of drugs used.
  - Drug and alcohol history including previous treatment.
  - Current and past medical history.
  - Psychological and mental health.
  - Social situation and forensic history.

#### Examination

Patient should undergo a physical and mental health examination.

#### Screening

Patient should be offered screening for drugs, hepatitis, HIV and sexually transmitted infections (STIs), after appropriate pre-test discussions.

#### Notification

Drug users should be notified to the relevant agencies in the four UK countries for the purpose of monitoring drug use and highlighting trends. (User information to be reported anonymously and in accordance with the Data Protection Act).

#### Ongoing care in the surgery

It is recommended that regular health checks, including monitoring of weight, nutrition, blood pressure and peak flow rate, take place to monitor progress and provide appropriate interventions, (e.g. on a 3 to 4 monthly basis).

## Executive summary

### Treatment options in the surgery

#### Prescribed medication

Prescribed medication should never be used in isolation from a whole package of care, including relapse prevention. Drug therapy is only effective for the most part in short-term treatment of symptoms such as depression or insomnia. Do not attempt pharmacological treatment where there is little or no evidence base for such an intervention.

#### Harm reduction

- Patients may well present with a problem needing support even though they plan to continue their drug use. It would be unhelpful to exclude them, although continued use can be more challenging, especially as there is no easy substitute medication but it can also be extremely rewarding.
- There is accumulating experiences in providing harm reduction advice and a number of principles and safer practices that can be discussed with the patient in order to reduce crack-related harm.
- It is possible to use self-control techniques and a range of other interventions, although there is little evidence base as yet.

### Sharing care outside the surgery

- Most surgeries will not be able to offer the full range of possible treatments.
- It is crucial to know about the local relevant resources and where people can be referred on to quickly, while at the same time avoiding any feeling in the patient that you are trying to get rid of them.
- There should be locally agreed integrated care pathways as well as a clear system of assessment and care coordination.
- Always ask users and local user groups for help. National drug user groups can also provide assistance to set up a local group, if there isn't one already.
- It is becoming increasingly important to recognise that many drug users are using a combination of drugs rather than just opioids alone. Therefore if you are part of a shared care scheme which is predominantly opioid focused, you need to consider increasing the flexibility of the scheme to reflect current trends.

#### Psychological interventions

- Arguably this is the most useful of the treatments, but will for the most part be conducted outside of the surgery or by a worker attending the surgery from an outside agency.
- All psychological interventions are improved by a positive relationship with a key person, whether doctor, drug worker or therapist. This needs to be patient-centred and a strong empathic engagement with patients is the key to success.
- Quality drug counselling can be at least as effective as professional psychotherapy.
- The main interventions are:
  - Cognitive behaviour therapy.
  - Motivational interviewing.
  - Minnesota method (12-step).
  - Relapse prevention.

#### Complementary and alternative therapies

There is some experience of benefit using complementary therapies on an individual basis, but evidence on a population base is not convincing.

## Executive summary

### Formal drug treatment settings

The National Treatment Agency (NTA) in England has introduced 'Models of Care', a framework for drug services to ensure that there is consistency and equity in the provision of services across the country.

This framework also provides a tiered categorisation of treatment types, so that drug treatment services are classified in a way easy to understand.

### Non-specific (general) (Tier 1)

- Primary Health Care Teams and General Practitioners providing General Medical Services.
- Probation and housing services.

### Open access services (Tier 2)

- The patient can access the range of Tier 2 services such as drop-in street agencies for advice and support as well as cocaine specific agencies. Tier 2 is a key area of provision for stimulant users as they should be able to just drop in when they are in crisis.
- Needle exchanges are also part of Tier 2 services. When injecting cocaine, a large number of needles and syringes are needed (much more than with heroin), because of cocaine's shorter half-life and the quantities of acid and water required.

### Community Prescribing Services (Tier 3)

- Many Tier 3 community prescribing services are geared towards opioid users and are not meeting the needs of cocaine users.
- These services need to be encouraged to look at the needs of the individual person using drugs rather than just the drug itself.

### Structured day programmes (Tier 3)

- These programmes tend to provide education about the drug, help with identifying the triggers for use, life and work skills training and general practical issues.

### Residential care (Tier 4)

- There are different systems in different areas for obtaining entry into residential care. Funding is usually through the Social Services Community Care Assessment Teams.

### Group specific issues

#### Users of different drugs

##### Primary crack users

It is important to advertise within your service that cocaine/crack users are welcome to access care.

##### Working with methadone and buprenorphine users who also use cocaine/crack

Patients on a substitute medication may not see their cocaine use as a problem. But methadone/buprenorphine and crack users have the added complication of combining a short acting drug with a long acting one. This increases the risk of overdose.

##### Heroin and crack users and speedballing (injecting heroin and cocaine together)

- Speedballing is an increasing practice.
- There is a need to provide harm reduction advice on safer use, particularly how to inject frequently with safety, as well as information about the two drugs, how they work together and the full range of needle exchange and injecting paraphernalia.
- When cocaine is used with heroin, the risk of overdose is increased because it is much more difficult to assess the effect of either drug individually.

##### Users of crack cocaine and alcohol

- When a patient uses alcohol with cocaine, cocaethylene is produced which is dangerous and can increase the risk of liver and heart disease, strokes and epilepsy.
- When seeing patients with a combination problem, both must be addressed.

##### Users of cocaine/crack and cannabis

Heavy cannabis use may exacerbate the tendency of crack to produce paranoid ideation.

##### Users of other drugs such as ketamine and sildenafil (Viagra)

Ketamine and sildenafil can complicate the effects of crack on the cardiovascular and central nervous system. Sildenafil and crack can be a problematic mix.

## Executive summary

### Different types of user communities

#### Black and minority ethnic groups

- Crack use is often heavily associated in the media with black people as the stereotype of crack users is steeped in historical racism. In reality many different people from all communities use cocaine/crack. However concerns about the spread of crack use and its impact on communities have been expressed by many African Caribbeans. There are also concerns about the patchy coverage of services that can meet the needs of these users.
- The basics of treatment in primary care are the same for any patient, but those primary care services treating users from different cultural backgrounds need to be aware of this issue and how it may impact upon the user, staff and the service itself.
- Specific black and minority ethnic groups health issues such as sickle cell anaemia can also be exacerbated by the use of crack and cocaine.

#### Young people (under 18 years old)

- When a young person presents, it is important to address the individual and not solely the drug(s). Confidentiality and respect is essential.
- If the young person is under 16 years, they should be referred to a specialist young person's service. If they are unlikely to attend, then it is reasonable to use the Fraser Guidelines.
- When seeing a young person alone, take a history, assess and discuss harm reduction in the same way as with other patients. Provide appropriate written advice and be aware that young people may use language that you don't understand, so ask them to explain what they mean.

### Women, pregnancy and child protection issues

#### Women

- Crack use can disrupt the menstrual cycle mainly through poor general health and chaotic lifestyle.
- Offer contraception.
- Many women may also have drug-using partners who need treatment and it is always better to provide help and treatment to both at the same time.
- Primary care is well placed to provide guidance to women on safer drug use and good sexual health.

#### Use in pregnancy

Pregnant women need good information about crack and its effects to allow them to make choices. Confidentiality is essential and outcomes improve with consistent advice, support, reassurance, integrated care services and consistency of attendance.

There is some evidence that suggests there is a link between stillbirths, miscarriages through placental detachment (placenta abruptio), premature labour and delivery and low birth weight and small-for-dates babies, though this may reflect lifestyle and smoking rather than a direct effect. Placental abruptio and pre-term rupture of membranes are the only confirmed problems associated with cocaine use.

Approximately one quarter to one third of the cocaine will pass across the placental barrier to the foetus, which may lead to agitation and apnoea initially at birth. Most of these symptoms will settle by comforting the baby and avoiding loud noises or bright lights. The 'crack' baby image is a myth.

Heavy cocaine use is likely to be incompatible with successful breast-feeding. If breast-feeding is to be successful, then cocaine use should be kept to a minimum. With the exception of HIV positive women, all mothers should be encouraged to breast-feed.

There is some evidence of later developmental problems, but research is conflicting.



## Executive summary

### Child and family issues and child protection

- GPs and other primary care workers can play an important part in providing professional support to parents and should apply the normal criteria in deciding whether a child might be at risk. Crack use *per se* is not a reason for assuming a child is at risk, but the lifestyle and problems associated with such use may be.
- Consult with all colleagues involved with the family and identify any current or potential problems.
- Childcare is improved if parents are in appropriate drug treatment. Stability in the family is important and child protection is paramount. Early involvement of Social Services may prevent the later need for care proceedings.

### Cocaine and the sex industry

- Many sex workers are providing sex for cocaine and have no time to access services.
- Unprotected anal and vaginal sex are common as they command a higher fee. There is a need to provide sexual health advice and safer sex/drug use information.
- There is also a new cohort of middle-aged men using cocaine/crack, introduced to it as a result of buying sex. These patients may not access traditional drug services and so primary care interventions are important.

### Crack and the criminal justice system

- Increasing numbers of people who use crack are in contact with the criminal justice system.
- Doctors, including GPs in custody suites are often untrained in working with crack users.
- Crack users sometimes use short-term sentences as a form of respite care. Cravings can then disappear, leading to false minimisation of the problem by the user.
- Prison should be seen as a window of opportunity for treatment.

### Information for patients

- It is vital to have a supply of good information for users of crack in a variety of appropriate formats and languages, according to local needs.
- The rights and responsibilities of a drug user should also be explained, and patient choice respected.

## Introduction

The use of cocaine in the UK has been rising steadily over the past decade. As the price has fallen, all the other indicators of use have risen such as: seizures of the drug by police and customs,<sup>1</sup> numbers of people using the drug in the general population,<sup>2</sup> numbers of those coming forward for treatment<sup>3</sup> and deaths from cocaine use.<sup>4</sup>

Cocaine powder still retains its 'champagne' media image associated with the rich and famous, and it is probably still true that those with the most serious cocaine problems have significant amounts of disposal income. However, it has become an increasingly unremarkable adjunct to a 'good night out' in a bar, pub or club for a large cross section of the population. Most of these people will not come to any appreciable harm and will not find it necessary to present to a doctor.

The same is also true for some of those who indulge in crack – the smokeable form of the drug – but over all, they are more likely to run into serious physical and mental health problems, especially chronic high-dose users. Those with serious crack problems are likely to have other drug problems as well as a whole host of other social, legal and economic problems to cope with, and the crime and violence sometimes associated with selling of the drug is a cause of great concern for many communities across the country.

The cost varies but is upwards of £40 per gram for cocaine powder with wide regional variations. Crack sells for between £5 to £20 per rock, depending on the size of the rock and the location. Several dozen rocks can be used in one session. It is possible to smoke over a £1,000 worth of crack in a single sitting.

So while not wishing to underestimate the harms caused by a chronic cocaine powder habit, which are considerable, the focus of this guidance booklet will be on crack cocaine, although the reader will find general information on cocaine and suggestions for further reading.

### Who is the guidance for?

The guidance is aimed at all those involved in primary care working with adults using cocaine, including GPs and other team members. It will also be useful to all working in the community with drug users. Increasing numbers of cocaine/crack users are presenting to primary care, yet GPs have precious little guidance on how to manage and treat these patients. It is important that GPs have a working knowledge of the problems faced by cocaine users and ways of reducing the harms they face. At the same time practitioners of all levels are advised not to work in isolation and to work within their level of competence.

This guidance has arisen from the pooled experience of experts in the field, including a range of practitioners from different treatment and healthcare backgrounds, as well as the experiences of users. It demonstrates that primary care can offer a variety of useful interventions to people using cocaine in all its forms and that treating crack users is possible and does not demand totally new skills.

### The evidence base and the role of users

This guidance is based as much as possible on the available published research, primarily from the USA, but it also relies on experience gained in the UK. And here drug users themselves have a valuable part to play in building up the evidence base for effective interventions. Probably because of media tales of gangsters and Yardies, crack users are among the most 'demonised' group of drug users. But in keeping with many drug users, they are knowledgeable about their situation – both in terms of their needs at any given point (harm reduction, abstinence or just simply engagement) – and their specific knowledge about the drug and the circumstances of its use. If you don't know something about the drug, ask someone who uses it. They will generally know more than you. Never underestimate the benefits of working together. Success usually stems from a positive and empathic practitioner/patient relationship.

Throughout this booklet, the term 'cocaine' is used to mean the drug in all its forms while 'crack' refers only to the drug in its smokeable form.

## The drug

### What is cocaine?

Cocaine is extracted from the leaves of the coca plant, which grows mainly in the mountainous regions of South America. When cocaine is first isolated from the plant, it is in its *base form* and is an alkaloid. Crushing and pressing the coca leaves and adding sulphuric acid and water turn it into a crystalline salt form. It then goes through a series of changes in the salt-base cycle ending up as cocaine hydrochloride powder.

To transform cocaine powder into crack, the cocaine base has to be freed from the salt and to do that the powder is heated up in a microwave with bicarbonate of soda and water. Crack is easily melted and vaporised, so it can be smoked. But it can also be injected by mixing with water and a weak acid, such as citric or ascorbic acid.

### How it is used?

- i. Dabbing:** Cocaine can be rubbed on to the gums. It is a local anaesthetic and the effects are similar but enhanced in comparison to chewing the coca leaf.
- ii. Snorting:** Cocaine is most commonly snorted in its hydrochloride powder form.
- iii. Piping:** Crack is most commonly smoked through a pipe. This is the quickest way to get the drug to the brain. Glass pipes, tin cans and water bottles are used.
- iv. Injecting:** Cocaine hydrochloride is soluble in water and can be injected. Crack or freebase must be reconverted to a salt to become soluble and capable of injection using citric or ascorbic acid. The effects are very slightly less euphoric though slightly longer lasting than piping.
- v. Chasing:** Crack can be chased on tin foil with heat applied from below, in the same way as heroin. Rocks are crushed to increase surface area.
- vi. Smoking/chipping:** This involves flaking bits of cocaine or crack into the top of a cigarette 'joint' and typically occurs in lower dose use.

### What are the main physical and psychological effects?

Cocaine is a stimulant drug. Users feel more alert and energetic, confident, physically strong and believe they have enhanced mental capacities. Common physical effects include dry mouth, sweating, loss of appetite and increased heart and pulse rate.

When snorted, cocaine produces a slow wave of euphoria, followed by a plateau and then a 'come down.' When smoked as crack, it has more intense and immediate effects because in this form, the drug is delivered to the brain much more quickly. Users then need to repeat the 'high' accompanied by anticipatory severe anxiety about avoiding the impending low. This cycle may take around 5 to 10 minutes. However, compulsive repetitive re-dosing fails to capture the strength of the initial euphoria.

Excessive doses can cause severe medical problems including death from pulmonary oedema, heart failure, myocardial infarction, cerebral haemorrhage, stroke and hyperthermia.

Large doses or quickly repeating doses of crack over a period of hours can lead to extreme anxiety, paranoia and visual and auditory hallucinations. These effects usually disappear as the drug is eliminated from the body. The after-effects of crack use may include fatigue, depression, paranoid ideation and depersonalisation as people 'come down' from the high.

Chronic high-dose crack use can result in some physical and marked psychological dependence. Once crack users stop, they will very quickly start to feel tired, panicky, exhausted and unable to sleep, and often suffer extreme emotional and physical distress. This can manifest itself in symptoms such as diarrhoea, vomiting, body tremor, insomnia, anorexia and sweating. Users will re-use crack in order to avoid these unpleasant effects, an indicator of dependence.

With chronic everyday use, restlessness, nausea, hyperactivity, insomnia, depression and weight loss due to poor eating may develop. Paradoxically, crack has its own in-built regulator since the side-effects of mental and physical over-stimulation often become so unpleasant that the user will seek to reduce their use.

***For a comprehensive overview of the health effects of cocaine, please see Appendix 1.***

### Different types of cocaine

#### Cocaine Hydrochloride

- Form** Crystalline or flaky white substance usually ground into powder (acid state).
- Route** Mainly snorted (but can also be injected and dabbed).
- Effect** Starts to take effect within a few minutes and gradually rises to full high in 12 to 20 minutes. Come down is also more gradual than crack.
- Cost** £40 to £50 per gram.
- Slang** Charlie, snow, coke, powder, snort.

#### Freebase Cocaine

Anecdotally this process was first developed by drug dealers in the 1970s to test the purity of cocaine hydrochloride by removing the hydrochloride (acid salt). Ammonia is combined with water and the cocaine and then heated. Freebase cocaine is formed, and extracted with ether.

- Form** Creamy/opaque lumps of high purity cocaine (alkaloid state).
- Route** Mainly smoked.
- Effect** Starts to take effect immediately, giving a short and very intense high. Come-down can be very rapid and deep.
- Cost** Mainly self-manufactured, but if sold same price as crack (£15 to £20 per 'rock').
- Slang** Base.

#### Crack

This involves a similar process to that of freebase but uses sodium bicarbonate instead of ether and ammonia. This form of cocaine can be easily manufactured at home, which accounts for its popularity and abundance.

- Form** Off white waxy lumps (alkaloid state). The more brittle, the higher the bicarbonate content, the more waxy the better the purity (unless it has actually been mixed with wax as a filler).
- Route** Mainly smoked (can only be injected if transformed back to acid).
- Effect** As with freebase (slower high, by 3 to 5 seconds, if injecting).
- Cost** £15 to £20 per rock, some people will sell it for £5 to £10 but these are smaller rocks.
- Slang** Rocks, stones, bones.

## The users

**These are generalisations and there are enormous areas of overlap between the groups of users below.**

### The recreational user

Uses infrequently and small amounts at social occasions with friends. Tends not to have a regular pattern of use. Psychological or physiological signs of use do not usually emerge. However, if use increases, the person moves on to binge use.

### The binge or problematic user

User actively seeks cocaine and will buy increased quantities, plans social activities to involve cocaine and establishes a recognisable pattern of use, isolating him or herself from others and using large quantities at one time. This pattern of use is potentially life threatening. The person may show psychological and physiological signs of use and begin to combine cocaine with other drugs. Serious financial problems may arise. This user may present for help.

### The chronic high dose or dependent user

The dependent or chronic user will consume as much as possible and may demonstrate a life-threatening pattern of use i.e. there is no ceiling to use other than finding the time and the money to use.

Values tend to be centred on cocaine use. Relationships and work are affected or are non-existent and there tends to be psychological and physical signs of use. This user may also present for help.

## Caring for the user in the surgery

### Overview

- Engagement and assessment form the first part of treatment.
- Supportive listening may be all that is required in the first instance.
- Manage any acute medical problems, such as breathing difficulties, chest pain or burns.
- Offer all usual general medical services: nutrition, weight monitoring, blood pressure, contraception etc.
- Harm reduction information about cocaine should be offered to all drug users.
- Hepatitis vaccination should be offered to all, hepatitis B for non-injectors and hepatitis A and B for injectors.
- It is important to develop a treatment plan with the patient.
- Obtain service user feedback to surgeries – what was helpful and what was not.

### First presentation

#### Crisis

It may be that a first presentation is a medical crisis. It may take time to engage with the patient because of their excitability and this may make it more difficult to manage in a primary care setting. But nonetheless, persevere. It is helpful to be able to get someone to sit with the user and help them to wind down. If nobody is available and the patient is stable medically, ask them to return an hour or so later when they have calmed down from their recent crack use.

People often present with anxious or paranoid thoughts, which can be discussed and defused. There are fears around how crack users present particularly in crisis. Talk to them like any other patient presenting in crisis and if you are responsive you will find aggression is avoided or deflected.

Ensure that receptionists and other staff are aware that on occasions users may need to be seen as an emergency.

**A user may present as a medical emergency:**

- Overdose (or the after-effects of an overdose)
- Acute asthma attack, chest pain, palpitations or myocardial infarction
- Mental health crisis: paranoia, depression, suicide threat or attempt

**Early identification**

Less acutely and while not an emergency, a patient may present with a particular set of symptoms including breathing problems, worsening asthma, hypertension, weight loss, mental symptoms or chest pains. Without self-disclosure, it can be difficult to identify cocaine use at an early stage, but if the patient is honest in this respect, then they should not be judged for their drug use. Look at lifestyle and the underlying needs of the user.

**The primary crack user**

A person may present who already has a problem with crack.

- Need to look at reasons why presenting now.
- Need to do a risk assessment, especially to assess risk of suicide and violence.
- Need to engage quickly – same or following day appointments because (unlike, say opiate users) crack users may present in a state of high anxiety, needing rapid intervention.
- Need to engage the patient and develop a relationship such that the user feels able to return.
- Engage through other means such as harm reduction advice or health problems.
- Not always crucial to focus on the drug and the user may not want their crack use to be targeted. May need to focus on the presenting symptoms such as cough, dyspnoea, burns etc.
- Need to think about a plan of action.
- Think about empathy and non-punitive engagement, but be prepared to say you don't know when you don't.

**User already in treatment for another drug problem e.g. opioid dependence**

- The user may present cocaine as a new problem, or changes in physical health may draw it to your attention.
- Cocaine may show up on random urine testing or be noted at regular review appointments.
- Assess the extent of the problem and what the user would like to do about it, if anything.
- Proceed with the assessment outlined below.
- Crack itself can heighten self-belief and even produce ideas of grandeur. These can be misinterpreted as cockiness or rudeness.

**Assessment for first presentation**

On the first visit, the patient should receive an initial assessment, which identifies problems and immediate needs. Following this, work should be carried out to establish if the patient is accessing any other services. If so, and with the patient's consent, the other services involved in their care should be contacted and a lead care coordinator appointed to make sure that duplication of any work is minimised and the patient receives a care package suitable to their needs.

**The assessment is similar to other patients who present with drug problems:**

- Current drug and alcohol use.
- Useful to ask about a 'typical using day' and a 'typical using week' (this can help to establish stereotypical patterns of drug use that might otherwise appear harmless or innocuous to the cocaine user). It also identifies runs of drug use and binge patterns that can be usefully addressed in treatment sessions later. It also helps to establish the depth of 'harmful use' versus 'dependent use.'
- Method and route of use of drugs.
- Drug and alcohol history including previous treatment

**Physical health:**

- Current and past medical history including change in weight, breathing problems, chest pains and sexual health

**Psychological and mental health:**

- General mood and current mood, noting swings; how feeling, whether anxious or depressed.
- Disturbance of sleeping patterns.
- Risk of self-harm, suicide.
- Phobias, obsessions, paranoia and hallucinations.
- Past mental health history.

**Social situation and forensic history:**

- Relationships, partner, family, children.
- Accommodation, employment, money concerns.
- Past and present contact with the criminal justice system.

**You may have to deal with the presenting issue and identify immediate risks on first meeting, and return to full assessment later.**

- Remember that many users are not just using cocaine but may be combining it with heroin, methadone, alcohol, benzodiazepines, amphetamines, ecstasy, ketamine and sildenafil (Viagra) etc. So be aware of the possible physical and mental health complications associated with various combinations.
- Patients may not want to stop using crack, or may at that point be desperate to stop, but believe that they can't.
- They will often be struggling with ambivalent feelings, so try to accentuate positive areas to build on.

**Examination****Undertake a physical and mental health examination including:**

- General health and complications of use, such as burns to lips, nose or thumbs, damage to nasal septum, and inspect injecting sites for damage and infection.
- Check teeth and gums for signs of disease.
- Pulse and blood pressure.
- Weight, height and body mass index.
- Measure peak flow.
- Examine the heart and if indicated arrange an ECG.
- Check full blood count, liver and kidney function.

**Screening**

- Urine drug screen and/or oral fluid tests.
- Offer hepatitis B and C and HIV (and hepatitis A if injector) screening and vaccinate as necessary.
- Cervical smear where appropriate.
- Sexually transmitted infections (STIs) including chlamydia screen.

**Notification**

Drug users should be notified to the relevant agencies in the four UK countries for the purpose of monitoring drug use and highlighting trends. (User information to be reported anonymously and in accordance with the Data Protection Act).

In England, all drug use should be notified to the National Drug Treatment Monitoring System (NDTMS), now run by the NTA. This is done on the paper forms if you are currently seeing small numbers of patients with drug problems. For larger numbers (more than 20 patients) it should be done electronically. In Wales, the National Drug Treatment Monitoring System (coordinated by Health Solutions) undertakes the monitoring. In Scotland, the Scottish Drug Misuse Database collects the data, while in Northern Ireland the collecting body is the Drug and Alcohol Information and Research Unit.



## Ongoing care in the surgery

When working with drug users it is essential to undertake ongoing monitoring of health like other medical conditions. It is recommended that regular health checks take place to monitor progress and provide appropriate interventions (e.g. on a 3 to 4 monthly basis).

### The review should:

- Review recent drug and alcohol taking.
- Ask about recent risk of blood borne viruses (HIV and hepatitis) and check hepatitis vaccinations are complete.
- Ask about changes in their health including changes in their weight, breathing difficulties, palpitations, chest pains.
- Undertake a general physical check of the skin for burns and injecting damage and nose for septum damage.
- Monitor weight and note changes.
- Take the blood pressure. If it is high it is worth repeating as it may reflect recent use.
- Monitor the peak flow rate.
- Check pulse rate for arrhythmias.
- Sexual health including use of contraception and condoms, last smear and recent STIs.
- Monitor recent mental health, ask about recent problems and significant episodes.

*For a suggested plan for your review, please see Appendix 2.*

### Motivating change

Over time when trust is built up, it is helpful to ask users about the areas of their life that are important to them such as the drug, health, housing, relationships (social and sexual), children and financial stability. Consider the areas identified by the user and ask them to place them in the order of current importance.

- a. Do they want this order to change, why and how?
- b. Where would the user like to aim towards in all these areas of their life?

## Treatment options in the surgery

### Psychological interventions

These are arguably the most useful of the treatments, but will for the most part be conducted outside of the surgery. All treatment is improved by a positive, non-punitive relationship with a key person, such as the GP or drug worker. For more details see page 9.

### Prescribed medication

Prescribed medication should never be used in isolation from a whole package of care, including relapse prevention. In light of the results of trials on a large number of drugs, it would seem reasonable to conclude that drug therapy is only effective for the most part in treating individual symptoms such as depression or insomnia (short-term only) after crack or other stimulant use has ceased. There is no substitute medication, although many have been tried, and care must be taken not to attempt pharmacological treatment where there is little or no evidence base for such an intervention. Psychological therapies still remain the mainstay of treatment.

**Benzodiazepines** short term can be useful to help agitation, to relax and to help sleep. They should only be used in low doses (starting 30 mg or less of diazepam daily and reducing rapidly) and short-term (less than 2 weeks). Remember they have their own addictive potential.

**Antidepressants** such as selective serotonin reuptake inhibitors and lofepramine are important only if underlying depression is confirmed. They should only be initiated after crack or stimulant use has ceased and SSRIs should be used with caution if cocaine use continues, because of the rare occurrence of the 'serotonergic syndrome.' Reboxetine, a selective inhibitor of noradrenalin re-uptake, is also being tried.

*For more details about the issues surrounding prescribed medication, please see Appendix 3.*



## Harm reduction

Some cocaine users may have got to the point where they want to stop and for them, abstinence is the only feasible way to appreciably reduce harm. However, others will want help to be able to better manage their drug use. Patients may well present with a problem for which they need support, and it would be unhelpful to exclude them because they plan to continue their drug use. Although this is sometimes more challenging, especially as there is no easy substitute medication, it can also be extremely rewarding.

Harm reduction is still a debatable area in the treatment of crack use. Some practitioners and users believe that no harm reduction is possible with crack because of the nature of the drug and the way it induces intense craving. However, because of this it could be argued that it is even more necessary. There is a body of experience to support harm reduction including a number of principles and safer practices that can be discussed with the patient in order to reduce crack related harm. It is possible to use self-control techniques and a range of other interventions, although there is little evidence base as yet.<sup>5</sup>

It is important to accept that route of administration and dosages are the most important factors when assessing problematic cocaine/crack use.

The five 'A's (ask, assess, advise, assist and arrange) used in smoking cessation<sup>6</sup> may be helpfully adapted for working with cocaine users:

- Ask about drug use at every opportunity.
- Assess users' interest in stopping or reducing.
- Advise about the risks of using, and the types of treatment available.
- Assist users to stop or reduce harm.
- Arrange follow up.

## Key messages for harm reduction

- There is no completely safe way to take cocaine/crack but much advice can be given about how to use the drugs more safely.
- Explain about possible health risks: local burns, damage to the lungs, heart and liver.
- Because cocaine needs to be injected frequently and acts as a local anaesthetic to the skin, this increases the risk of damage to the tissues, local and systemic infections and DVT.
- Always advise about sharing any injecting, piping or snorting equipment, particularly injecting equipment.
- Advise pipers to switch from using plastic bottles or cans to quality glass pipes, and to avoid inhaling ash, paint, dust, water and other particles into the lungs.
- Encourage the move towards non-injecting routes of use, such as chasing or piping.
- Get the patient to set themselves rules and stick to them. For example, put off the first pipe of the day for as long as possible.
- Overdose:
  - Understand the signs of overdose, which may be: sudden rise in body temperature, flushed face, hot skin, muscle cramps, stiffness in arms and legs.
  - Know how to manage it.
  - Always call for an ambulance early.

When discussing harm reduction with an individual, encourage them to bring in their paraphernalia to the surgery. Get them to show you what they do and work together to minimise the harm caused by using the drug in that way.

***For more detailed information on harm reduction, please see Appendix 4.***

## Sharing care outside the surgery

General Practice is the port of entry for most drug and alcohol treatment. But most surgeries will not be able to offer the full range of possible treatments. Therefore, it is crucial to know about the local relevant resources and where people can be referred on to quickly, while at the same time avoiding any feeling in the patient that you are trying to get rid of them.

There should be locally agreed integrated care pathways as well as a clear system of assessment and care coordination.<sup>7</sup> It is important not to assess patients repetitively and excessively. All agencies in the area should be using the same assessment tools and as patients are referred to other agencies, their assessments should follow them. This will prevent repetitive re-assessment. If you are continuing to work with a patient in partnership with other providers, be aware of the importance of clear care coordination, providing the patient is happy and aware of confidentiality rules. Always ask users and local user groups for help. National drug user groups can also provide assistance to set up a local group, if there isn't one already.

It is becoming increasingly important to recognise that many drug users are using a combination of drugs rather than just opioids alone. Therefore if you are part of a shared care scheme, which is predominantly opioid focused, you need to consider increasing the flexibility of the scheme to reflect current trends. How the new GMS contract will affect this remains to be seen.

Care coordination can be difficult. If you need assistance in locating local services, have a look at the Helpfinder section of the DrugScope website:

[www.drugscope.org.uk/drugbaseii/home.asp](http://www.drugscope.org.uk/drugbaseii/home.asp)

*For shared care protocols, please see Appendix 5.*

## Psychological interventions

These are arguably the most useful of the treatments, but will for the most part be conducted outside of the surgery. All psychological interventions are improved by a positive relationship with a key person, doctor, drug worker or therapist. This needs to be patient-centred and a strong empathic engagement with patients is the key to success. Quality drug counselling can be at least as effective as professional psychotherapy.<sup>8</sup>

### Cognitive Behaviour Therapy (CBT)

CBT refers to a group of therapies that aim to reduce dysfunctional emotions and behaviour by altering thinking patterns, based on the assumption that prior learning is currently having adverse consequences. The purpose of therapy is to reduce distress or unwanted behaviour by undoing this learning, or by providing new, more adaptive learning. It has emerged in the USA research as an important treatment method, and possibly the treatment of choice for heavy cocaine users.<sup>9</sup> CBT needs to be provided by people who are trained and competent to provide it.

In the treatment of people who use crack, cognitive behavioural therapy can be used to change thinking (or facilitate *cognitive* change). This is brought about by a variety of possible interventions, including the practice of new behaviours, analysis of faulty thinking patterns, and the teaching of more adaptive self-talk.

CBT can be provided in groups rather than individually, and in the US has been shown to provide the same benefits.<sup>8</sup> The group can also act as social support and an aftercare resource.

### Motivational Interviewing (MI)

MI is an effective evidence-based approach for overcoming the ambivalence that keeps many people from making change in their lives. Its techniques are used to help move a person's thinking through the 'change cycle.' MI can be used to address life skills, stop/limit drug use, reduce harm and prevent relapse. Again it needs to be provided by people who are trained and competent in this therapy, but can be a useful tool for general practice.

### Minnesota Method (12 steps)

Available mainly through self-help groups or residential centres, this method is used extensively and successfully around the world. It is possible to use the more general fellowship of Narcotics Anonymous (NA), but in some areas there is a separate fellowship of Cocaine Anonymous (CA). Evidence shows that cocaine 12-step treatment it is not as effective as CBT, but is useful with some individuals.<sup>8</sup> The basic philosophy is to accept you have become powerless over the drug and use the 12 steps to regain your power over the drug and your thinking.

### Relapse prevention

Relapse prevention is the term used to cover a range of strategies used to reduce the ever-present risk of relapse. This can take place with an individual drug worker, using MI or CBT skills or through a relapse prevention group. Self-help groups such as CA, can also be helpful in some people.

### Complementary and alternative therapies

There is some experience using complementary therapies on an individual basis, but evidence on a population basis is not convincing. They may be useful in helping to attract and retain patients from groups where these approaches are accepted and valued. Randomised trials using auricular acupuncture may not justify its standard use, but neither is there any reason to deny it to people who want this to form part of their treatment package.<sup>10</sup>

#### Complementary therapies can:

- Help with relaxation.
- Help to reduce/cope with cravings.
- May help to reduce the effects of the 'come-down.'
- Use of 'calming' and 'relaxing' essential oils such as geranium and lavender can be beneficial.
- Use of shiatsu or massage can help the user relax and loosen tense muscles.
- Hypnotherapy may help in selected individuals.

## Formal drug treatment settings

### Models of Care

The National Treatment Agency (NTA) is a Special Health Authority, created by the Government in 2001 to improve the availability, capacity and effectiveness of treatment for drug misuse in England.

The NTA has introduced 'Models of Care' a framework for drug services to ensure that there is consistency and equity in the provision of services across the country. This framework also provides a tiered categorisation of treatment types so that drug treatment services are classified in a way easy to understand. The framework means that the individual has a range of services available to them according to their need and that in theory they can move through the tiers as their need requires, although waiting lists, funding and so on can present barriers to treatment (see figure 1).

### Open access services (Tier 2)

The patient can access the range of Tier 2 services such as drop-in street agencies for advice and support and cocaine specific agencies. Tier 2 is a key area of provision for stimulant users as they should be able to just drop in when they are in crisis.

Many users also need social, financial and work assistance and many Tier 2 services can provide the following:

- Benefit and work support.
- Money management e.g. managing giro or pay day.
- Housing support to secure/retain adequate housing.
- Return to study, adult education and if appropriate dyslexia assessments.
- Volunteering networks can act as a useful first step.
- Occupational 'back to work' programmes.
- User involvement – encourage patients to become more involved in local user groups so they can have a voice in local treatment provision.

### Needle exchanges

Needle exchanges are also part of Tier 2 services. Because of the short half-life of the drug, when injecting cocaine a large number of needles and syringes are needed (much more than with heroin) and large amounts of acid and water are required to make up the solution. It may be preferable to direct the client to a fixed site needle exchange (which can be run in the surgery), as the pharmacy needle exchange packs may be inappropriate or contain insufficient equipment.

### Generic or specific Tier 2 services

There is an on-going debate whether specific or generic drug services best serve the needs of crack users. Perhaps both are needed in areas where there is high crack use, but certainly all Tier 2 services must cater for the needs of crack users as well as opioid and poly drug users.

### Community prescribing services (Tier 3)

Many Tier 3 community prescribing services, including Community Drug Teams, Shared Care Schemes and Specialist-prescribing Services are geared towards opioid users and are not meeting the needs of cocaine users,<sup>11</sup> whereas most drug users now use a combination of drugs. Where this is happening, Service Commissioners should be made aware of this. The Shared Care Monitoring Group is an ideal forum for encouraging and supporting change whereby services meet the needs of the service user whatever drug or drugs are involved.

### Structured day programmes (Tier 3)

These programmes tend to work on education about the drug, help with identifying the triggers for use, life and work skills training and with practical issues. Users need to be referred on to the team that provides assessment for community care, day programmes and rehabilitation funding, which is usually a team within Social Services. This is either situated in Social Services or increasingly in the specialist drug teams.

The Tier System		
Tier	Type	Service
1	<b>Non-specific (general)</b>	General Practitioners (General Medical Services) Probation Housing
2	<b>Open access</b>	Advice and information Drop-in service Harm reduction services like needle exchange.
3	<b>Community services</b>	Community drug teams, community prescribing and shared care Drug dependency units Day treatment
4a	<b>Specialist services (residential)</b>	Inpatient Residential rehabilitation
4b	<b>Highly specialist (non-Substance Misuse)</b>	Liver units Forensic services

Figure 1

### Residential care (Tier 4)

There are different systems in different areas for obtaining entry into residential care, but funding is again usually through the Social Services Community Care Assessment Teams, which may be based in the Specialist Drug Services (Tier 3) or in Social Services. In many places there is direct access from primary care to this team, who can then develop a package of care and after-care, and arrange funding.

There is good evidence from the USA and the National Treatment Outcomes Research Study (NTORS) in the UK about its effectiveness in selected patients.<sup>12</sup> It is not always necessary to detoxify prior to admission to residential care.

### Other approaches

1. Working with the user and their family together is helpful. Family therapy can also be useful.<sup>13</sup>
2. The Community Reinforcement Approach, a form of benevolent social engineering, aims to rearrange an individual's social and working life so that sobriety is more rewarding than a life dominated by alcohol or drugs.<sup>14</sup>
3. Contingency contracting (used in USA, not currently available in UK), where crack users are rewarded for their abstinence with grocery and entertainment vouchers. These seem to act as specific reinforcers, and are not just a matter of paying people to stay drug free.
4. A cocaine vaccine is in an advanced state of development and may well have an impact on treatment. The vaccine works by reducing the amount of cocaine that crosses the blood-brain barrier and therefore renders cocaine ineffective for about three to six months. The ethics of its use in prevention and in treatment are contentious.<sup>15</sup>

### After care

Aftercare, including relapse prevention, particularly after a period of treatment as either an in or outpatient is vital. The patient should continue to be supported in the surgery by the GP or shared care worker. They may also need referring on to the appropriate service for aftercare support. Stopping is a stage and not an end-stage. Aftercare is part of treatment and many of us fail in this area. Users report that some treatment services lack aftercare and relapse prevention support, but these can be essential to continued success, particularly in terms of remaining drug free or stable.

## Group specific issues

### Users of different drugs

#### Primary crack users

It is important to advertise within your service that cocaine/crack users are welcome to access care. This can be done in the form of a poster in the waiting room and information about drug use distributed around the waiting areas.

#### Working with methadone and buprenorphine users who also use cocaine/crack

Patients on a substitute medication may not see their cocaine use as a problem. Work with the patient to decide whether it is a problem, or just occasional recreational use. Indicators will be their drug-using histories and ongoing observation of how patients present at their appointments. Methadone/buprenorphine and crack users have the added complication that one is a short and one a long-acting drug. This increases the risk of overdose.

#### Heroin and crack users and speedballing (injecting heroin and cocaine together)

Speedballing is an increasing practice with users tending not to use specialist services because they say they have little to offer them. There is a need to provide harm reduction advice on safer use, particularly how to inject frequently safely, information about the two drugs and how they work together and the full range of needle exchange and paraphernalia equipment.

When cocaine is used with heroin the risk of overdose is increased because it is much more difficult to assess the effect of either drug individually. There are other issues linked to dual use. These include the risk of crack escalating if heroin is not available, alcohol/benzodiazepine 'boosting' with the potential for overdose and increased harm, and the development of a secondary addiction. Treating a stimulant overdose is quite different from an opioid-based episode.

### Users of cocaine/crack and alcohol

When a patient uses alcohol with cocaine, cocaethylene is produced. This is dangerous as it is toxic and can increase the risk of liver and heart disease, fits and epilepsy. The risks of sudden death, suicide, accidents and violence are all increased. When seeing patients with a combination problem both must be addressed. Cocaine and alcohol can also both act as disinhibitors and patients can therefore place themselves in dangerous situations.

### Users of cocaine/crack and cannabis

Heavy cannabis use, particularly high content THC variants, such as skunk, may exacerbate the tendency of crack to produce paranoid ideation.

### Users of other drugs such as ketamine and sildenafil (Viagra)

Ketamine and sildenafil can complicate the effects of crack on the central nervous system. Users usually know the short-term effects of the drugs they are using but are often less careful about long-term effects. Using crack with ketamine, which is a disassociate anaesthetic, is a good example of a poorly researched problematic combination. Sildenafil and crack may be less rewarding for users than it promises, and may also cause cardiovascular problems. Crack has aphrodisiac qualities and promotes disinhibited sexual behaviour in both genders. However, in males it can act as a performance inhibitor, as well as reduce vaginal secretions in women. Sildenafil promotes and prolongs erection but the mix of drugs can frustrate orgasm. This may result in violence directed at a person selling sex.

## Different types of user communities

### Black and minority ethnic groups

Crack use is often associated in the media particularly with black people and the stereotype of a crack user is steeped in historical racism. In reality many different people from all communities use cocaine/crack.

Even so, concerns about the spread of crack use and its impact on the communities have been expressed by many African Caribbeans, as well as concerns over the patchy coverage of services that can meet the needs of these users. It is crucial to develop services to meet the needs of diverse communities. It is also important to understand how a combination of factors that characterise the lives of many BME people, in particular, risk factors that revolves around social exclusion and deprivation, means that the context within which drug use exists provides an environment in which it can be particularly problematic.

The basics of treatment in primary care are the same for any patient but those primary care services treating users from different cultural backgrounds need to be aware of this issue and how it may impact upon the user, staff and the service itself. It is not an issue that can be adequately addressed unless there is understanding, and services will need to give consideration to service accessibility, appropriateness of service and potential barriers to service utilisation.

Specific black and minority ethnic groups health issues such as sickle cell anaemia can also be exacerbated by the use of crack and cocaine.

### Young people

There is a changing image of cocaine among younger people with a new trend towards mixing drugs, particularly in the dance drug culture. As with all patients, when a young person presents, it is important to address the individual and not solely the drug(s). Confidentiality and respect are essential.

If the young person is under 16 years, they should be referred to a specialist young person's service. If they are unlikely to attend, then it is reasonable to use the Fraser Guidelines. These allow treatment to be provided to a young person if he/she understands the advice, has sufficient maturity to understand what is involved, and the doctor cannot persuade the young person to inform parents or allow the doctor to inform them.<sup>16</sup>

When seeing a young person alone, take a history, and assess and discuss harm reduction in the same way as with other patients. Provide written advice that is appropriate. Be aware that they may use language that you don't understand, so ask them to explain what they mean

Other patients who are using the drug safely can be helpful in explaining the safer use of cocaine, but care is needed to avoid young people being introduced into circles that may cause them further harm.



## Women, pregnancy and child protection issues

### Women

Like any chaotic drug use, crack can disrupt the menstrual cycle mainly through poor general health and chaotic lifestyle. Offer contraception and remember to explain that some drug-using women may not be having periods or be eating well, and could be under the impression that they cannot or are unlikely to get pregnant. This is untrue and needs to be made clear. Many women may also have drug-using partners who need treatment and it is always better to provide help and treatment to both at the same time.

Women are likely to use primary care services for support and advice, so we are well placed to provide guidance on safer drug use and good sexual health.

### Use in pregnancy

Pregnant women need good information about crack and its effects to allow them to make choices. Confidentiality is essential and outcomes improve with consistent advice, support, reassurance, integrated care services and consistency of attendance.

There is quite a lot of information but most of it is of limited value and can be conflicting but there is a risk, especially compared to opiates in pregnancy, and sufficient reason for concern.<sup>17</sup>

There is some evidence that suggests there is a link between stillbirths, miscarriages through placental detachment (placenta abruptio), premature labour and delivery and low birth weight and small-for-dates babies, though this may reflect lifestyle and smoking rather than a direct effect. Placental abruptio and pre-term rupture of membranes are the only confirmed problems associated with cocaine use. Placenta abruptio, if it occurs after 24 weeks would result in pre-term labour not miscarriage. Abruptio does not inevitably result in delivery at the time; this depends on the extent of the abruptio and may or may not result in the death of the fetus.

Approximately one quarter to one third of the cocaine will pass across the placental barrier to the foetus, which may lead to agitation and apnoea initially at birth. Most of these symptoms will settle by comforting the baby and avoiding loud noises or bright lights. The 'crack' baby image is a myth.

Heavy cocaine use is likely to be incompatible with successful breast-feeding so, if breast-feeding is successful, cocaine use will not be too high to allow it. Consequently there is no reason why cocaine using women should not be encouraged to try breast-feeding since their more vulnerable babies have most to gain from it.

All women should be encouraged to breast-feed except, currently, those who are HIV positive.

A review in 2002 showed little evidence of damage in babies and children aged up to 6 years,<sup>18</sup> but other studies show subtle but consistent changes in children aged 6 to 7 years.<sup>19</sup> A controlled study published in 2002 found cocaine-exposed children were twice as likely to show delay in cognitive development by the age of two as a control group.<sup>20</sup>

Some children born to crack-using mothers have displayed seizures or strokes, cerebral palsy, mental retardation, vision and hearing impairments, urinary tract abnormalities, autism and learning disabilities. These are all rare and it is unhelpful to frighten mothers. Forcing people into abstinence rarely works. However, it is a woman's right to have this information.

### Child and family issues and child protection

The Advisory Council on the Misuse of Drugs report 'Hidden Harm' includes much valuable information and advice about the problems faced by children of drug-using parents.<sup>17</sup> GPs and other primary care workers can play an important part in providing professional support to parents and should apply the normal criteria in deciding whether a child might be at risk. Cocaine use *per se* is not a reason for assuming a child is at risk, but the lifestyle and problems associated with such use may be. Extensive crack use can disrupt the relationship and bonding between the mother and infant, as attention is primarily on the drug rather than the child and can lead to development and emotional problems.

Primary care can work with Social Services to provide a package of care for the parents. Consult with all colleagues involved with the family and identify any current or potential problems. As always, it is important to be honest and open with parents, particularly about social services role and involvement.

What we do know is that childcare is improved if parents are in appropriate drug treatment. Stability in the family is important and child protection is paramount. Early involvement of Social Services may prevent the later need for care proceedings. Also lack of access by a parent to their children may trigger problems and breakdown in relationships. There is also increased frustration if parents are referred for help, and none is then forthcoming.

Remember that our responsibilities to the children of our patients, in the family environment are the same as our responsibilities to our patient.

## Cocaine and the sex industry

There is a growing association between cocaine and the sex industry and an increase in risk-taking behaviour. The promise of cocaine is sometimes used to recruit men and women into the sex industry. Many sex workers are providing sex for cocaine and have little time to access services. Crack has been reported as 'the new pimp' because crack is seen as the new controlling factor in sex worker's lives.<sup>21</sup>

Unprotected anal and vaginal sex are common as they command a higher fee. There is a need to provide sexual health advice and safer sex/drug use information. This includes supplies of condoms and equipment to all sex workers, as well as easy access to STI testing and treatment. It is important to note that reduced vaginal secretion can increase the risk of condom failure.

There is also a new cohort of middle-aged men using cocaine/crack, introduced to it as a result of buying sex. These patients may not access traditional drug services hence primary care interventions are important.

## Crack and the criminal justice system

Increasing numbers of people who use crack are in contact with the criminal justice system. Doctors, including GPs, in custody suites, are often untrained in dealing with crack users. In addition, there is a lack of crack interventions within prisons and deficient aftercare on leaving.

New criminal justice interventions, such as the Drug Interventions Programme (previously called the Criminal Justice Intervention Programme [CJIP]), may confuse the issue for GPs. CJIP developments have resulted in increased capacity building within the criminal justice system, but it potentially causes a criminal justice perspective towards crack use rather than a health one.

Crack users sometimes use short-term sentences as a form of respite care. Cravings can disappear, leading to minimisation of the problem by the user. However prison could and should be seen as a window of opportunity for treatment.

## Information for patients

It is vital to have a supply of good information for users of cocaine in a variety of appropriate formats and languages, according to your local needs. These should cover the effects of the drug, harm reduction, interactions with other drugs, and what treatment is available and where.

The rights and responsibilities of a drug user should also be explained and patient choice respected. It is also useful to explain general practice and how it works.

***For a leaflet that can be photocopied and given to patients, please see Appendix 6.***



## Appendix 1

# Cocaine and health

Cocaine and particularly crack can create a number of physical and mental health problems in high dose users, some of which can be severe. Clinicians need to recognise signs and symptoms of cocaine/crack use and provide the appropriate medical care needed. All conditions need standard appropriate treatment that would be used when these conditions present in any patient, and specific treatment for any of the specific conditions, such as crack lung.

## Physical health

### General

The user can suffer from general poor health and aches and pains, as well as specific pains in the shoulders and numbness in hands. Nutritional status is often poor and weight loss can result. This can sometimes be seen as positive by users, especially if there is weight gain from other treatment, such as methadone mixture or neuroleptics. Users are also at increased risk of accidents. The weight loss can be dramatic due to neglecting to eat and the appetite suppressing effect of crack.

Many users may be combining cocaine with other drugs such as: heroin, methadone, alcohol, benzodiazepines, amphetamines, ecstasy, ketamine and sildenafil (Viagra) etc. and the additional effects on health of these other substances must be considered.

Try to think about cocaine/crack use when clustering and combinations of symptoms just don't add up.

### Skin problems

- Itching, rashes and eczema.
- Colour change: grey pallor.
- Local burns especially to thumbs and mouth.
- Using/living environment may add further skin problems.

### Chest problems

- There is a range of chest problems including breathing difficulties, developing or worsening of asthma, and 'crack lung.'
- All of these can be made worse by cigarette or cannabis smoking.
- Fumes from paint on cans used as pipes, or ammonia which has been used in the preparation of freebase, can cause coughing and lung damage.

- As cocaine has anaesthetic properties, the user may be unaware of the burning due to ammonia fumes, and this can cause damage to lungs and nasal passages.
- Crack can anaesthetise the lungs, which can decrease the user's ability to feel foreign bodies which may enter the lungs during smoking, such as ash, pieces of metal gauze, water vapour and parts of plastic pipes, and also decrease the cough reflex which would remove these foreign bodies.
- Also on occasions burns to the lungs can occur due to breathing in the heat from the flame. Risks of this may increase if a burner is used rather than a lighter.
- The action of the lung cilia can be reduced, leading to a reduction in the peak flow and result in worsening lung function. This effect can also make the user more susceptible to tuberculosis.
- Lung damage can also lead to pleurisy and emphysema.
- Pulmonary embolism can follow the development of DVT.

**Crack lung:** This usually occurs 1 to 48 hours after heavy cocaine smoking, and is a form of hypersensitivity reaction. Patients may present with dyspnoea, cough, haemoptysis, fever, tachypnoea, chest pain, wheeze and widespread itching.<sup>22 23</sup> It is unknown whether it is fully reversible.

The clinical course can take two forms.<sup>24</sup>

- Acute and self-limiting resolving within 24 hours.
- Progressive, with a high percentage of patients requiring mechanical ventilation. A short course of steroids may be of benefit.

### Cardiovascular problems including heart, blood pressure and circulation problems

- Blood pressure can be increased and needs to be checked regularly. This can result from a period of sustained use, and tends to return to normal after a period of abstinence. High salt intake can also contribute, where salt has been used in crack preparation.
- Cocaine use can lead to rhythm changes and arrhythmias, which if untreated can be fatal. The risk of arrhythmias increases greatly during binges, but reduces again during periods of low use/abstinence. Cannabis and cigarette smoking can increase these arrhythmias.
- Angina, myocardial infarction and congestive heart failure can result from reduced heart muscle function, increased heart size and arteriosclerosis of the arteries.<sup>24</sup>
- Cocaethylene, formed by combination of cocaine and alcohol increases the risk of heart problems.
- Bacterial or viral endocarditis can result from injecting.
- DVT, more common than in heroin injectors.

### Liver problems

- Cocaine can exert stress upon the liver and heavy use may lead to increased liver damage, especially if the patient is hepatitis C positive or is a heavy drinker.
- Acetone is used to recycle the cocaine remaining in the pipe after smoking. It is toxic and can cause liver damage.
- Some patients will consume large amounts of alcohol to cope with the feeling of 'come-down.' This may mean that a whole bottle of spirits is taken in a very short time period, increasing the risk of damage.
- When cocaine and alcohol are taken together they produce cocaethylene, which is more toxic to the liver than either substance alone.

### Kidney problems

- Renal artery spasm, thrombosis or embolism can result in renal colic and/or kidney infarction.

### Central Nervous System

- Convulsions/seizures can be caused by increased body temperature and constriction of the small blood vessels in the head, but cocaine and its breakdown products also reduce the epileptic threshold. Cocaethylene is especially potent in this regard, and its effect may last for up to 24 hours after ingestion.

- Cerebral vascular accidents (CVA) (strokes) resulting in cerebral haemorrhages, which are caused by delicate blood vessels breaking
- Hallucinations, delusions, paranoia, depression, anxiety.

### Blood Borne Viruses

- HIV, hepatitis B and C can be transmitted by all the main methods of drug use, via sharing injecting equipment and unprotected sex.
- Hepatitis C can lead to a multitude of symptoms including lethargy and depression.
- If the patient is HIV positive, drug use can increase the viral load and decrease the CD4 count. Patients with a low CD4 count or who are immuno-suppressed are at increased risk of infection.

### Sexual health

- Increased risk of contracting STIs as a result of unsafe and unprotected sex, due to the disinhibiting effect of stimulants.
- Anaesthetic effect, reduction of vaginal secretions and prolongation of sexual activity leading to genital trauma.
- Combined sildenafil (Viagra) and crack use can cause problems.
- People who buy sexual services may start using crack. This is becoming a small but significant population.
- Risk-taking leading to violence (especially in the sex industry).

### Other problems

- Chronic use can result in abdominal cramps, gastritis and ulcers.
- Cocaine use can cause immuno-suppression leading to increased risk of infections.
- Complications can occur with coexisting physical problems such as epilepsy and sickle cell disease.
- Blood vessel spasm leading to blindness, to ischaemia in limbs and to infarction in the intestines.
- Cocaine can raise the blood glucose, and coupled with poor eating habits results in an increased risk of diabetes. Usual diabetic symptoms, such as thirst, hunger, polyuria and fatigue can be masked by crack taking.
- Anaemia can result from poor injecting techniques (resulting in loss of blood) and poor diet.
- Herpes can be passed from sharing pipes and sex.

## Mental health

### General problems

Cocaine use can result in a whole range of psychological and psychiatric problems. It can cause marked changes in moods and behaviour. It can also exacerbate an underlying psychiatric problem. You will need to gain the patient's confidence and cooperation to explore this. Patients can become frankly psychotic on cocaine and may have the full house of delusions and hallucinations. On presentation they need assessment and treatment like everyone else. In rare cases this may involve major anti-psychotic prescribing and possibly psychiatric intervention if other treatment approaches have failed.

Sometimes treatment is difficult, particularly where there is a pre-existing mental health problem. Some mental health teams will not see people until they abstain from their cocaine use, although this is often impossible. The mental health needs of complex patients should be managed by mental health services.<sup>25</sup>

### Anxiety and depression

- Marked increase in anxiety and irritability, especially when withdrawing after a session of use.
- Reduction in dopamine and serotonin can cause anxiety and chemical depression.
- Can lead to self harming, suicidal ideation and suicide.
- Crack could be taken to self-medicate underlying depression, but may also precipitate mania and intensify the depression.
- Care must be taken with antidepressants and only used if underlying depression confirmed.

### Fear, paranoid ideation and cocaine-induced psychosis

- Try to diagnose whether the paranoid ideation is from a psychiatric cause or is drug-induced.
- Talk to patients to find out where the fear/suspicion is coming from.
- Excited/agitated delirium can result after a bout of heavy use. The time it lasts varies between patients and consists of agitated and bizarre behaviour, hyperthermia and extreme paranoia
- Tactile hallucinations are characteristic of stimulant use – the 'cocaine bug' – this may cause obsessive skin-picking.

### Cocaine used to modify mood in schizophrenia, bipolar disorders, personality disorders and unrecognised ADHD

#### Schizophrenia

Can worsen the condition or act to modify mood, especially against the unwanted effects of the major tranquillisers or against the negative symptoms of schizophrenia.

#### Bipolar disorders

Increased amounts taken during manic phase, but also used to self-medicate against depression. Patients can develop huge debts when manic, which can cause major problems when they are depressed again, including risk of violence from dealers.

#### Personality disorders

Used to manage abnormal mood states.

#### Attention Deficit Hyperactivity Disorder (ADHD)

Cocaine may be used by people with undiagnosed or diagnosed ADHD to increase attention span and concentration.

#### Eating disorders

Associated with anorexia nervosa, as it acts and can be used as an appetite suppressant.

#### Other addictions

The patient can develop an opiate, alcohol or benzodiazepine problem when these drugs are used as relaxants after a bout of cocaine use.

## Appendix 2

# Review health check for cocaine users

(Adapted from 8 Point Health Check by Matthew Southwell, Traffasi)

**It is recommended that about every 3 to 4 months a review be undertaken to monitor the health of the drug user.**

This could be set up as a template on Emis or other GP computer system

## Monitoring questions

### 1. Current drug use

- Current amount of cocaine/ crack using?
- Other drugs, such as benzodiazepines, opioids, currently using and amounts?

### 2. Alcohol use

- How many units do you drink in an average week?
- Do you drink alcohol while or immediately after using crack?
- Do you have any health problems that affect your liver, such as hepatitis C or cirrhosis?

### 3. Physical health

- Do you inject cocaine and has this resulted in any tissue damage?
- Do you smoke crack and has this resulted in any burns?

### 4. Changes in weight

- Have you noticed any changes in your weight?

### 5. Lung capacity

- Have you experienced any breathing difficulties?
- Did these occur after an episode of smoking crack or other time?
- Do you have asthma and what is your current treatment?

### 6. Heart Screening

- Have you had chest pains during in or after a crack using session?
- Have you had a very rapidly beating heart (palpitations) during after a crack using session?

### 7. Sexual health

- Do you have any concerns about your sexual health at the moment?
- Have you had penetrative sex without a condom in the last 3 months?
- If yes, do you have any irritation, soreness, discharge or inflammation around your vagina, penis or back passage (as applicable)?
- Are you concerned about HIV or other STIs?
- Do you have access to condoms?
- Do you know how to use them?

### 8. Mental health

- How would you describe your frame of mind before you ever used cocaine?
- How would you describe your frame of mind now?
- In what ways does your cocaine use improve your feelings about life?
- Do you suffer from depression? And how often?
- Do you ever think about committing suicide?
- Do you ever see or hear things, which other people don't see?
- Do you have experience of hearing voices or seeing non-physical images?

## Examination on review

---

### a. Physical health

- Check injecting (especially groins, arms and legs) and burn sites (especially thumb, nose, chin and face) as appropriate

### b. Changes in weight

- Record weight and note increase or decrease from previous review

### c. Lung capacity

- Record peak flow rate and note increase or decrease from previous review

### d. Heart

- Record blood pressure rate and note increase or decrease from previous review

### e. Mental health

- Mental health review

## Record of advice given and action taken

---

### 1. Current drug use

- Review harm reduction advice on cocaine using
- Review advice on risk of use of benzodiazepines

### 2. Alcohol

- Advice given on combined effects of alcohol and cocaine

### 3. Physical health

- Advice given on wound management
- Safer injecting teaching session
- Referral for safer injecting advice
- Advice given on burn management
- Advice given on burn prevention

### 4. Weight monitoring

- Advice given on cocaine use and diet
- Guidance on how to stimulate appetite, establish routines for healthy eating, and the link between diet and heart health
- Referral to dietician
- Prescription of food supplements as part of short-term planned weight gain programme

### 5. Lung capacity

- Advice given on lung care
- Prescription of asthma inhalers, if required

### 6. Heart, blood pressure and overdose

- Advice given about removal of salt from rocks
- Advised about impact of high dose using on the heart
- Informed about the risk of stopping the heart from high dose using, particularly injecting
- Advice given on overdose management

### 7. Sexual health

- Advice on safer sex
- Screening for STIs and / or blood borne viruses
- Provision of free condoms

### 8. Mental health

- Advice on management of psychological problems
- Provide or arrange counselling
- Referral to specialist agencies

## Appendix 3

# Prescribing

Prescribed medication should never be used in isolation from a whole package of care, including relapse prevention. In light of the results of trials on a large number of drugs, it would seem reasonable to conclude that drug therapy is only effective for the most part in treating individual symptoms such as depression or insomnia (short-term only) after crack or other stimulant use has ceased. There is no substitute medication, although many have been tried, and care must be taken not to attempt pharmacological treatment where there is little or no evidence base for such an intervention.

**Benzodiazepines (e.g. diazepam):** Can be used to help the 'come-down' from the agitated state that can result from a binge, to relax and to help sleep. They are useful in these circumstances but should only be used in low doses (less than 30 mg) and short-term (less than 2 weeks). Remember they have their own addictive potential.

**Other sedatives:** Phenothiazines, such as chlorpromazine or haloperidol, are used for the same purpose but are best not be used in primary care. These should not be used if there is cardiovascular damage e.g. atrial fibrillation

**Antidepressants:** such as selective serotonin reuptake inhibitors e.g. fluoxetine, and lofepramine are important only if underlying depression is confirmed and crack and other stimulant use stops. SSRIs should be used with caution if cocaine use continues, because of the rare occurrence of the 'serotonergic syndrome', which is characterised by changes in autonomic, neuromotor and cognitive-behavioural function triggered by increased serotonergic stimulation.<sup>26</sup> Work has taken place comparing imipramine and placebo in users coming off cocaine and has found no difference. Desipramine treatment of cocaine dependence in methadone-maintained patients showed no effect.<sup>27</sup> Reboxetine, a selective inhibitor of noradrenalin re-uptake, is also being tried.

**Disulfiram (Antabuse®):** There is some evidence that disulfiram reduces use by decreasing the pleasure associated with cocaine use.<sup>28</sup> When drinking is integral to how the user manages their cocaine/crack use, deterring alcohol use through disulfiram can also interfere with cocaine/crack use patterns, but should not be used in primary care.

**Propranolol (beta blockers):** has been shown in some studies to reduce anxiety and relapse rate. It can be used during withdrawal. Contraindicated in asthmatics, as it can cause bronchial spasm

**Amphetamines:** A recent pilot study in Australia has shown that there may be a role for dexamphetamine prescription in refractory cocaine users. This is supported by a two small-scale studies in USA showing that long-acting amphetamine may be useful in cocaine-using methadone patients.<sup>29</sup> The evidence as yet does not justify wider adoption of this treatment. Other work using dexamphetamine in primary users showed it was not effective and it should not be used in primary care.<sup>30</sup>

**Methylphenidate (Ritalin®)** may reduce craving and is currently in trials. Two new dopamine-reuptake inhibitors are also being explored, but have never been used in primary care. Trials are also planned for selegiline, which reduces dopamine metabolism.

### Review of other medication tried

A review of the evidence shows little or no support for the clinical use of dopamine agonists, mazindol, phenytoin, nimodipine, amantadine, bromocriptine, carbamazepine, bupropion (Zyban®) and lithium in the treatment of cocaine dependence.<sup>31</sup>

## Appendix 4

# Harm reduction

## Safer drug use

There is no completely safe way to take cocaine but much advice can be given about how to use the drugs more safely. The GP can carry this out, as can other members of the team such as the shared care worker. Chronic high dose users are at much greater risk.

When discussing harm reduction with an individual, encourage them to bring in their paraphernalia to the surgery. Get them to show you what they do and work together to minimise the harm caused by using the drug in that way.

**General:** Some risks are common to all routes, such as damage to the heart and liver, potential infection with blood borne viruses from sharing any equipment /paraphernalia and/or risky sexual behaviour when taking the drug. Each route has its own dangers and complications.

### Risks associated with the method of use:

#### Dabbing

- Dentition, local tissue damage and infection.

#### Snorting

- Damage and perforations to the nasal septum, nose bleeds and rhinitis from repeated use.

#### Smoking

- Burns to lips, fingers and face.
- Damage to the lungs from crack itself and dust, ash, plastic etc from the paraphernalia and in the preparation of the drug.

#### Intravenous use

- Cocaine needs to be injected frequently (more than heroin) and acts as a local anaesthetic to the skin increasing the risk of damage to the tissues. The user may be unaware of the damage being caused to skin, soft tissues and/or veins.
- Local infection, such as abscesses, cellulitis, granulomas and streptococcus A skin infections.
- Systemic infections such as septicaemia, bacterial endocarditis and osteomyelitis.
- Risk of deep vein thrombosis (DVT) from groin injecting.
- Risk of hepatitis and HIV from sharing equipment greatest from injecting.
- Marked tissue damage can result from the subcutaneous route (skin popping) and is not recommended.

### Advice for specific methods of use:

#### Snorters

- Before snorting a new batch of powder dab a bit on gums to test quality and purity.
- Don't share straws (possible hepatitis C transmission).
- Make powder as fine as possible before snorting.
- Place straw high up the nostril.
- Alternate nostrils to lessen damage to one side.
- If septum is bleeding, take a break.
- Take general care of the nose and use nasal douching.

#### General advice to smokers (pipers, chippers and chasers)

- Avoid sharing equipment
- Buy best lighter and foil you can afford to minimise burns.
- Take care of your lips to avoid bleeding and sores and use water based salve.
- Drink plenty of water.
- Prevent burns and learn about burn care.
- Understand that hepatitis can be spread by sharing equipment.



### Pipe smokers (pipers)

- Always use your own pipe and never share pipes, to avoid virus transmission.
- If using plastic bottles or cans, advise switching to glass pipes, to avoid inhaling ash, paint, dust, water and other particles into the lungs.
- Encourage the purchase of a glass pipe (found in some tobacco shops). Explain that glass pipes are healthier as they permit less damaging particles to pass into the lungs and can be cleaned between sessions.
- If glass pipes are not available, adapt a miniature spirit bottle that has a dimple in the end, in which a hole is made. A metal tube such as a car aerial is placed in the neck of the bottle, wire gauze is placed in the exposed end of the tube and crack is placed on the gauze. The drug is smoked through the hole in the dimple.<sup>5</sup>
- To avoid contaminants always use wire gauze in the vent, not scouring pads.
- Promote 'ash free' pipes and smoking techniques.
- Encourage the move towards non-injecting routes of use such as chasing.

### Smoking using cigarettes or joints (chippers)

- Use unbleached card to make filters, to avoid breathing in harmful substances on the card.
- Advise the user to work out how much they are actually using – may not be as little as they think.
- Be cautious whom you pass the joint to – some may not realise it contains cocaine.

### Burning on foil (chasers)

- Advise people to chase more effectively by burning the foil, placing the crack on it and inhaling the smoke through a tube as you burn the crack with a lighter under the foil.
- Break up the rock a little before burning and don't put too much drug on the foil.
- Explaining effective chasing is important, to prevent users from switching to injecting or some other method in order to get more effect from their drugs.
- Use tinfoil and not foil from sweet packaging which is often covered with contaminants.

### Injectors

- Advise users to ensure they have sufficient amounts of injecting equipment – 'one kit for every hit.'
- Make sure cocaine injectors realise they need more injecting equipment than heroin users.
- Advise them about the way cocaine tends to anaesthetise the injection site leading to tissue damage and increased risk of abscesses from missing the vein.
- Check injecting sites and promote safer sites on the arms and legs. Explain the damage caused by cocaine injecting, and why there is a quicker transition to groin or neck injecting and the associated dangers.
- Try to promote switching to a non-injecting route, such as piping.
- Inform them that overdose is most often linked to injection, so always use in a group where others can watch for signs of overdose.

### Overdose

- Most common with injecting. Signs develop rapidly within 2 to 3 hours.
- Understand the signs of overdose:
  - Mild to moderate signs are: restlessness, pressured speech, behavioural change, sudden rise in body temperature, flushed face, hot skin, muscle cramps, stiffness in arms and legs.
  - Severe cases signs are: unresponsive to stimuli, arrhythmias, circulation and respiratory collapse, hypertension, tachycardia, fever, increased motor activity, seizures and confusion.
- Advise the drug user to call for an ambulance early, rather than wait until the situation is critical.
- Management while awaiting the ambulance is to check the airway and breathing, try to control the temperature with fans etc and manage any seizures.
- In hospital the management would be to sedate, usually with benzodiazepines, control seizures, treat any cardiac complications, control blood pressure and temperature and ensure intravenous access and correct any electrolyte imbalance.
- Increased risk with speed-balling or when user is in custody and has swallowed large amounts to avoid police detection.



## Self-control model

Drug users can be supported in self-regulating their drug use. Their use is dependent on drug availability, the individual and environmental setting, life structure and their rules and rituals. Helping users to understand the interaction of these factors and how they relate to their drug taking can influence their use and enable more control

### Talk about choice with the user:

- It is their choice to be out of control.
- Encourage a return to services if they feel they are becoming out of control.
- Get people to take responsibility for their own drug use.

### Plus:

- Accept that drug users tend to use drugs and will not/cannot stop just because you tell them to.

## Peer based self-control

### General tips:

- Get users to set themselves rules and stick to them.
- Put off the first pipe of the day.
- Eat before using.

### Scoring:

- Remind users that dealers make money when users lose control.
- Suggest they buy their drugs (score) all in one go so they don't have to go back to the dealer.
- Have a ceiling on the money spent on a session, and don't carry a cash card.
- Don't keep all money in the house. Could ask a trustworthy friend to look after it for a few days or post money to yourself.

### Coming down/ending a session:

- Discuss how to manage a session, such as always plan the session and do it in a quiet setting with people they feel comfortable with.
- Space out the drug and use less.
- Explain the use of relaxation techniques, exercises, herbal teas and essential oils to wind down a session.
- Some people find cannabis helps with the come-down, but explain some are made paranoid.
- Explain that if they use downers, such as diazepam or heroin they all need some time to work.
- Diazepam should be taken at least 30 minutes before last pipe.
- Explain that alcohol can be dangerous.
- Explain that even the worst 'comedown/crash' will be over in 45 to 60 minutes. Once through that period, things will feel much better.
- Recommend eating as this may help the user to feel better after a binge.
- Again, reinforce the risks of overdose.
- Try to leave the area where the episode has taken place, visit family or friends.

## Appendix 5

# Developing protocols for shared care

Most Shared Care Schemes are set up to manage opioid users and rarely meet the needs of cocaine users, whereas most drug users now use a combination of drugs. Schemes should be encouraged to meet the need of the individual, not a specific drug.

Establishing clear protocols for this is important. They should aim to maximise your time with your patient and ensure effective care and/or smooth onward referral mechanisms where appropriate. The protocols should range from what happens when a cocaine user comes into your service, to good working relationships with other local services.

The basic questions which you need to discuss before drawing up shared care protocols are: Why do we need them; who are they for; what should they contain and how to do it.

### Why do we need them?

- To promote access to care for all drug users, including cocaine users who are currently not accessing services at the moment.
- General practice is the most accessible and available part of the NHS and therefore it seems obvious that it should cater for cocaine users.
- Many methadone and other opiate substitute patients are also using cocaine and this issue should be addressed.
- Taking cocaine use on board in primary care can be empowering, and extend your service beyond becoming just substitute therapy maintenance clinics.

### Who are they for?

- They should be aimed at the GP, drug workers and wider primary health care team.

### What should they contain?

- You will need to have clearly marked out roles and responsibilities e.g. who does the hepatitis vaccinations, who does the harm reduction work and who does the Motivational Interviewing and CBT. This may or may not turn out to be the GP.
- Develop locally agreed care pathways.

### The content of your protocols should seek to address the following issues:

- Promote a more accepting and understanding attitude with some knowledge behind it.
- Engagement including retention and motivation for both patient and clinician who have to work with a difficult problem.
- Patient education, for example, whether to use leaflets, posters and videos.
- All information should aim to promote harm reduction messages and the protocols should illustrate how to make fast and appropriate referrals.

### How to do it – how to draw up cocaine protocols

- Services have to reflect local needs and therefore it is useful to undertake a local needs analysis.
- Must be grounded in best practice, using the available evidence and not opinion.
- Must adapt to local arrangements, so consult widely with your DATs and PCOs.
- Those responsible for clinical governance should have an understanding of what you are doing.
- Discuss with the primary care health team and incorporate suggestions and deal with concerns.
- Involve your local drug agencies at an early stage.
- Always consult and involve local user groups at the beginning and right through the process.

You will then need to amend and repeat the process of consultation. This should then be followed by dissemination and training of staff in the implementation of your new protocols.

### Developing a training scheme

You could develop a training scheme in your local area that includes specific training days for GPs and other practitioners, and specific training sessions for surgery staff e.g. receptionists and other support staff. You could initiate a specialist mentors scheme to support your work and/or make contact with national crack specialists to offer advice, guidance and update on any new research.

### Developing a payment scheme

Payment should be for **caring for the patient, not the drug they are taking** or what you might be prescribing. This issue is going through a period of change at the moment with the evolution of the new GPs' contract, and it is therefore a perfect time to establish improved protocols.

## Appendix 6

# Patient information

### What is cocaine powder?

It is often called coke and can be snorted. Because of the small surface area inside your nose (compared to your lungs) and the fact that coke causes veins to constrict, snorting doesn't get you as high as piping or fixing. Coke also has a high melting temperature (over twice as high as crack), which means that it begins to decompose when you try to smoke it. Like snorting, some people prefer the milder buzz of 'Charlie Spliffs.' Coke will dissolve in water making injecting an apparently easy option.

### What is crack?

Crack is the base form of cocaine. It has a relatively low melting temperature making it effective and convenient to smoke. It is not water-soluble, meaning you can't inject it without adding an acidifier like citric acid or vitamin C. Piping is just as effective as injecting in getting the drug into you and safer if you use a glass pipe.

### So what happens when you take cocaine?

Cocaine is a stimulant that acts on the central nervous system. It also has anaesthetic properties, which is why your gums go numb if you rub a dab of powder on them. So you may not feel damage being caused to your nose when you snort, to your lungs when you smoke, or to your skin or tissues when you inject.

Using cocaine, particularly by injection or by piping crack, promotes the release of chemicals in the brain that are very important to our ability to survive and enjoy life. This is why cocaine is so compelling and provides such a big high. The downside is that big highs usually mean big crashes and the thrill of stimulation very rapidly becomes a melancholic lull. Adrenalin, for example, is one of the chemicals released in the brain. It may shift your mood from confidence to paranoia in a couple of minutes. This can be scary for people around you and is responsible for some of the more unsettling behaviour associated with crack.

### What are the main risks?

- Heart and chest problems such as heart attacks and breathing difficulties.
- Sharing of any equipment, especially injecting equipment, allows the transmission of HIV and hepatitis.
- Financial and social problems associated with losing control of your drug use.

### How can I reduce them?

- Learn about the drug and how to self-regulate.
- Learn how you can reduce the harms associated with your use.
- Move from injecting to piping or smoking.
- Don't mix your drugs, but if you do, understand the additional risks.
- Learn about overdose and how to protect yourself and manage overdose in others. This may not be the same as a heroin overdose, so find out how things might be different and how to respond.

### What can I get from my GP?

- Help, support and information.
- How to use more safely, strategies for control and harm reduction advice.
- What treatment is available and where.
- Access to counselling.
- Always find out the system for getting to see the doctor, nurse or drug worker.

## Appendix 7

### Additional reading

**Advisory Council on the Misuse of Drugs:**

Hidden harm: responding to the needs of children of problem drug users. Home Office, 2003. 106p.

**Beaumont, B.** ed. Care of drug users in general practice: a harm reduction approach Second edition. Radcliffe Publishing, 2004.

**Effective Interventions Unit.** Psycho stimulant research: a practical guide. Scottish Executive, 2002. Download at [www.drugmisuse.isdscotland.org/eiu/pdfs/psych\\_guide.pdf](http://www.drugmisuse.isdscotland.org/eiu/pdfs/psych_guide.pdf)

**Scottish Advisory Committee on Drug Misuse.** Psycho-stimulant Working Group Report 2002. Download at [www.scotland.gov.uk/library5/health/pwgr.pdf](http://www.scotland.gov.uk/library5/health/pwgr.pdf)

---

## Appendix 8

# Useful organisations and websites

### **Substance Misuse Management in General Practice (SMMGP) – [www.smmgp.co.uk](http://www.smmgp.co.uk)**

SMMGP supporting primary care to work with people who use a range of drugs, including cocaine in primary care.

### **Conference on Crack and Cocaine (COCA) – [www.coca.org.uk](http://www.coca.org.uk)**

COCA aims to raise awareness of the changing needs of the crack cocaine user, through information dissemination and networking, in purchasers, providers and the public, and of the issues surrounding crack cocaine use.

### **Release – [www.release.org.uk](http://www.release.org.uk)**

Release provides advice to drug users, their families, friends, and statutory and voluntary agencies. In particular they provide a legal helpline and a special helpline for heroin users.

### **The Alliance – [www.m-alliance.org.uk](http://www.m-alliance.org.uk)**

The Alliance supports people who receive prescribed drugs for the treatment of their drug dependency.

### **Traffasi – [www.traffasi.com](http://www.traffasi.com)**

Training and consultancy agency with particular expertise around crack and cocaine use, heroin, stimulants, user involvement and motivational interviewing.

### **DrugScope – [www.drugscope.org.uk](http://www.drugscope.org.uk)**

DrugScope is the UK's leading independent centre of expertise on drugs. Its aim is to inform policy development and reduce drug-related risk. Free online searching of the DrugScope information database of over 100,000 references.

### **Exchange Supplies – [www.exchangesupplies.org](http://www.exchangesupplies.org)**

Provides a range of harm reduction tools, conferences, videos and publications.

### **FRANK – [www.talktofrank.com](http://www.talktofrank.com)**

The new face of the National Drugs Helpline providing free, confidential information 24 hours a day.

### **National Treatment Agency for Substance Misuse – [www.nta.nhs.uk](http://www.nta.nhs.uk)**

### **Main government website for drugs policy, government initiatives etc – [www.drugs.gov.uk](http://www.drugs.gov.uk)**

### **HIT – [www.hit.org.uk](http://www.hit.org.uk)**

Health information agency with useful leaflets on cocaine and crack.

## References

- 1 Home Office. Drug seizure and offender statistics 2001 and 2002. Statistical Bulletin 08/04. Home Office 2004
- 2 Home Office. British Crime Survey for England and Wales. 2001 Home Office, 2001
- 3 National Drug Treatment Monitoring System. Provisional statistics 2001/02. 2002/03. Department of Health, 2003
- 4 St George's Hospital Medical School. National Programme on Substance Abuse Deaths. Annual Report for 2000.
- 5 Southwell, M. More than a pipe dream: reducing crack's harm. *Druglink*, 2003, 18 (3), p.6–9, May/June.
- 6 Coleman, T. ABC of smoking cessation: cessation interventions in routine healthcare. *British Medical Journal*, 2004, 328, p.631–633.
- 7 National Treatment Agency. *Models of Care*. Download at [www.nta.nhs.uk/publications/models\\_of\\_care.pdf](http://www.nta.nhs.uk/publications/models_of_care.pdf)
- 8 Crits-Christoph, P and Siqueland, L. Psychosocial treatment for drug abuse: selected review and recommendations for national health care. *Archives of General Psychiatry*: 53(8), 1996, p.749–756.
- 9 Carroll, K.M. Therapy manuals for drug addiction: a cognitive-behavioral approach: treating cocaine addiction. NIDA, 1998
- 10 Margolin, A et al. Acupuncture for the treatment of cocaine addiction: a random controlled trial. *JAMA*, 2002, 287 (1), p.55–63
- 11 Audit Commission. Changing habits: the commissioning and management of community drug treatment services for adults. Audit Commission, 2002
- 12 Gossop M., et al. National Treatment Outcome Research Study (NTORS) after five years: Changes in substance use, health and criminal behaviour during five years after intake. National Addiction Centre, 2004.
- 13 Copello, A, et al. A treatment package to improve primary care services for relatives of people with alcohol and drug problems. *Addiction Research*, 8 (5), 2000, p.471–484
- 14 Smith, J, et al. Take the network into treatment. *Drug and Alcohol Findings*, 2004, 10, p.4–7.
- 15 Hall, W and Carter L. Ethical issues in trialling and using a cocaine vaccine to treat and prevent cocaine dependence. Sydney: National Drug and Alcohol Research Centre, 2002
- 16 [www.show.scot.nhs.uk/confidentiality/publications/FRASER%20GUIDELINES.doc](http://www.show.scot.nhs.uk/confidentiality/publications/FRASER%20GUIDELINES.doc)
- 17 Advisory Council on the Misuse of Drugs. Hidden harm: responding to the needs of children of problem drug users. Home Office 2003.
- 18 Frank, D et al. Growth, development and behaviour in early childhood following prenatal cocaine exposure. *JAMA*, 2001, 285, p.1613–25
- 19 Mayes, L.C. et al. Regulation of arousal and attention in pre-school children exposed to cocaine pre-natally. *Annals of the New York Academy of Science*, 2002, 846, 126–43.
- 20 Singer, L.T. et al. Cognitive and motor outcomes of cocaine-exposed infants. *JAMA*, 2002, 287 (15), p.1952–60
- 21 Taylor, D. Sex for sale – new challenges and dangers for women working on and off the streets. London: Mainliners, 2003.
- 22 Tashkin, D.P. Airway effects of marijuana, cocaine and other inhaled illicit agents. *Current Opinion in Pulmonary Medicine*, 2001, 7(2), p.43–61
- 23 Meisels, I and Loke, J. The pulmonary effects of freebase cocaine: a review. *Cleveland Clinical Journal of Medicine*, 1993, 60(4), p325–329
- 24 Heilpern, K. and Karras, DJ. Cocaine-induced cardiopulmonary disease. [www.thrombosis-consult.com/articles/Textbook/76\\_cocaine.htm](http://www.thrombosis-consult.com/articles/Textbook/76_cocaine.htm)
- 25 Department of Health. Mental Health Policy Implementation Guide: Dual Diagnosis Good Practice Guide. London: DOH, 2002. Download at [www.dh.gov.uk/assetRoot/04/06/04/35/04060435.pdf](http://www.dh.gov.uk/assetRoot/04/06/04/35/04060435.pdf)
- 26 Sternbach, H. Serotonin syndrome: how to avoid it, identify and treat dangerous interactions. *Current Psychiatry Online*, 2002, 2 (5).
- 27 Arndt, I et al. Desipramine treatment of cocaine dependence in methadone-maintained patients. *Archives of General Psychiatry*, 1992, 49(11), p.888–93.
- 28 Petrakis, I. et al. Disulfiram treatment of cocaine dependence in methadone-maintained opioid addicts. *Addiction*, 2002, 95 (2), p.219–228.
- 29 Grabowski, J et al. Dextroamphetamine for cocaine dependence treatment: a double blind randomised clinical trial. *Journal of Clinical Psychopharmacology*, 2001, 21 (5), p.522–526
- 30 Hayes, G. Personal communication, 2002.
- 31 Lima, M.S et al. Pharmacological treatment of cocaine dependence: a systematic review. *Archives of General Psychiatry*, 1992, 49, p.900–905

**For additional copies, and for further information about training on cocaine, crack and other issues relevant to primary care based drug and alcohol treatment, please contact**

Jo Betterton  
Drug & Alcohol Misuse Training Programme  
Royal College of General Practitioners  
Office 314  
Frazer House  
32–38 Leaman Street  
London  
E1 8EW  
020 7173 6091  
jbetterton@rcgp.org.uk

or

Mark Birtwistle  
Substance Misuse Management in General Practice  
c/o Bolton, Salford & Trafford Mental Health NHS Trust  
Bury New Road  
Prestwich  
Manchester  
M25 3BL  
0161 773 9121  
mark@smmgp2.demon.co.uk

This guidance, and other resources including an interactive discussion forum, are available on the SMMGP website at [www.smmgp.co.uk](http://www.smmgp.co.uk)