Fact sheet
Maintenance treatment

A. Definition and objectives

What is maintenance treatment?

- Treatment of drug dependence by prescription of a substitute drug (agonists and antagonists) for which cross-dependence and cross-tolerance exists, with the goal to reduce or eliminate the use of a particular substance, especially if it is illegal, or to reduce harm from a particular method of administration, the attendant dangers for health (e.g. from needle sharing), and the social consequences (Demand Reduction – A Glossary of terms, UNDCP).

Aims and objectives

- Treatment of opioid dependence consists of pharmacological and psychosocial interventions with the intention of reduction or cessation of opioid use and reduction of harms associated with opioid use.
- The aims of agonist maintenance treatment include: reduction or cessation in illicit opioids,; reduction or cessation of injecting and other blood born virus risks, reduction of overdose risk, reducing criminal activity and improving psychological and physical health.
- Opioid agonist maintenance treatment is increasingly recognized to be the most effective management strategy. Agonist maintenance treatment is indicated for all patients who are opioid dependent and are able to give informed consent and for whom specific contra-indications do not exist.
- In recent years, the value of psychosocial treatment has also been demonstrated, particularly when used in combination with pharmacotherapy, be it in the context of opioid agonist maintenance therapy, opioid withdrawal or relapse prevention

B. Evidence

- Methadone maintenance treatment is known to reduce drug-craving as well as morbidity associated with opioid dependence. Furthermore treatment outcome in methadone maintenance seems to be improved with increased dosages and the provision of adequate psychosocial support.

- Cochrane reviews found the efficacy of buprenorphine maintenance treatment to be comparable to methadone maintenance with advantages in some treatment settings, in alternate day dosing, better safety profile, and milder withdrawal syndrome.
- Slow-release morphine might prove as an alternative to methadone and buprenorphine substitution treatment.
- A rather new development is the prescription of heroin to chronic, treatment-resistance, heroin-dependent patients in some countries of Europe. Heroin-assisted substitution treatment might be an effective option for chronically addicted patients for whom other treatments have failed. However, it requires considerable resources as patients usually inject three times per day under supervised conditions at treatment centers, which need to have long operating hours as well as high demands on personnel and security.
- Codeine (Dihydrocodeine = DHC) is an analgesic agent, which is available for maintenance treatment in a few european countries. Due to a shorter bioavailability compared to other opioid agonists, codeine treatment might require closer monitoring as it has to be administered more than daily.
- The buprenorphine/naloxone combination compound contains buprenorphine, a partial agonist at the μ-opioid receptor, as well as naloxone, an antagonist at the μ-opioid receptor. While there is only a limited number of comparative studies available, buprenorphine/naloxone seems to be equally effective as buprenorphine alone, while buprenorphine/naloxone might be less likely to be misused intravenously.

C. Recommendations

Treatment environment

- Pharmacological treatment programs and interventions should be integrated or linked with other medical and social services and interventions to ensure possibility of transition of patients to another treatment modalities as their treatment needs change.
- Men and women can be treated in the same facility, providing that culturally appropriate and gender specific needs

Choice of treatment and dosing

- Methadone should be considered the optimal treatment with buprenorphine reserved for patients in whom methadone is not wanted, inappropriate or ineffective, of for whom it is anticipated that

buprenorphine will improve the quality of life in other ways. Buprenorphine might be a safer option but there is not yet sufficient evidence to advocate its value over methadone on this basis.

- Buprenorphine is effective for the treatment of opioid dependence and where available should be offered as alternative to methadone for opioid dependent patients. Reasons for use of buprenorphine include: previous response to buprenorphine or lack of response to methadone; short duration of action of methadone in the past; interaction between methadone and other medications taken; specific adverse effects of methadone; treatment availability; and patient preference.
- In patients being treated with agonist maintenance pharmacotherapy, clinicians should be encouraged to use adequate methadone doses, 60-120mg.
- In patients being treated with agonist pharmacotherapy, clinicians should be encouraged to use buprenorphine doses in the range of 8-24 mg.
- To maximize recruitment into, and retention in agonist maintenance treatment programs, policies and regulations should allow flexible dosing structures, without restriction on dose levels and the duration of treatment.
- Methadone and buprenorphine are not suitable for people with decompensate liver disease (for example cirrhosis with jaundice and ascites) as they may precipitate hepatic encephalopathy. They may also worsen acute asthma and other causes of respiratory insufficiency.
- Other contra-indications listed by the manufacturers are: severe respiratory depression, acute alcoholism, head injury, raised intracranial pressure, ulcerative colitis, biliary colic, renal colic.

Diagnosis and assessment

- The diagnosis of opioid dependence and other medical conditions should be made by trained health care personnel. If the diagnosis leads to agonist maintenance treatment it should be done by a trained physician. Social conditions should be determined by social workers or staff trained in social conditions.
- Patient history and self reported drug use are generally reliable, but for making a diagnosis of drug dependence but these should be correlated with other methods of assessment including and history from family and friends, the clinical examination and relevant investigations
- A detailed individual assessment of treatment needs includes: past treatment experiences; medical and psychiatric history; living conditions; legal issues; occupational situation; and social and cultural factors, that may influence drug use.

- Patients should have proof of identity before commencing treatment with controlled medicines. The patient must be able to give informed consent before treatment.
- Voluntary testing should be offered as part of an individual assessment, accompanied by pre- and post- test counselling.
- All patients who have not been exposed to hepatitis B should be vaccinated against it, with consideration given to accelerated vaccination schedule to improve completion rates.
- Voluntary pregnancy testing should be offered as part of an individual assessment.

Management

- In some cases, a simple and short-term intervention such as assistance with opioid withdrawal will result in an immediate and lasting improvement.
- However, in many others, treatment will have to be regarded as a long-term, or even a life-time process, with the occasional relapse. The aim of treatment services in such instances is not only to reduce or cease opioid use, but also to improve their health or social functioning gradually, to encourage them to try again, or to avoid some of the more serious consequences of drug use.