10 Somatoform disorders and substance use

10.1 Somatoform disorders

The common feature of somatoform disorders is the presence of physical symptoms that suggest a general medical condition. However, these symptoms are not adequately explained by a general medical condition by the direct effects of a substance, or by another mental disorder (such as anxiety producing palpitations or breathlessness, depression causing lack of energy).

Symptoms cause significant distress or impairment in social, occupational or other areas of functioning. There is no diagnosable medical condition that can fully account for the physical symptoms. People with somatoform disorders are reluctant to accept that psychological factors may be contributing to their physical symptoms.

This expression of physical symptoms is not a conscious deception by the patient.

There are a number of diagnostic subtypes of somatoform disorders.

In addition, unexplainable physical symptoms can be seen in situations where the symptoms are intentionally expressed. If the motivator behind this is the adoption of the sick role, then the condition is termed a ‘factitious disorder’; if the intent is some external gain, then the condition is termed ‘malingering’.

It is important to note that while unexplained physical symptoms are extremely common, most people with such symptoms do not have a somatoform disorder – most of the ‘somatizing’ presentations to general practice settings would not meet the criteria for one of these disorders.

Similarly, most people presenting with pain do not have a ‘pain disorder’ or form a somatoform disorder, but rather, have pain of organic origin that may be expressed in a range of ways.

10.1.1 Somatization disorder

This disorder is a polysymptomatic disorder commencing before the age of 30 and extending over a period of years. It is characterised by multiple somatic symptoms in a combination of pain, gastrointestinal, sexual and pseudoneurological symptom areas.

10.1.2 Undifferentiated somatoform disorder

This disorder is characterised by unexplained physical complaints that last for at least six months and are below the threshold for a diagnosis of somatization disorder.

10.1.3 Conversion disorder

This disorder involves unexplained symptoms or deficits affecting voluntary motor or sensory function that suggests a neurological or other general medical condition. Psychological factors are judged as being associated with the symptoms or deficits.

10.1.4 Pain disorder

Pain is the predominant focus of clinical attention in this disorder. Additionally, psychological factors are judged to play an important role in the onset, severity, exacerbation and maintenance of the disorder.
10.1.5 Hypochondriasis
This disorder involves a preoccupation with the fear of having, or the idea that a person has, a serious disease based on the individuals misinterpretation of bodily symptoms or functions.

10.1.6 Body dysmorphic disorder
This disorder involves a preoccupation with an imagined or exaggerated defect in physical appearance.

The following disorders are not within the group known of somatoform disorders, but may present with physical symptoms for which there is no adequate physical cause.

10.1.7 Chronic fatigue syndrome
This syndrome refers to a symptom complex of marked and prolonged fatigue for which no identifiable physical cause can be found.

10.1.8 Factitious disorder
This disorder is characterised by physical or psychological symptoms that are intentionally produced in order to assume the sick role (psychological reasons assumed).

10.1.9 Malingering
- This involves intentional production of false or grossly exaggerated physical or psychological symptoms motivated by external incentives such as financial compensation, avoidance of work or obtaining drugs.
- Malingering disorders differ from factitious disorders in that external incentives are absent in factitious disorders.

Management approaches to somatoform disorders
- Patients with somatoform disorders present considerable diagnostic difficulty and treatment can be challenging. Somatisation should be best viewed as a process rather than a diagnosis. Many GPs report difficulties in dealing with somatising patients.
- Referral times for clients to attend pain clinics, psychologists and psychiatrists equipped to manage clients with somatoform disorders are often long or unavailable. Frequently, patients fail to attend.
- It is important to develop a good working relationship with the patient. However, the major challenge is developing a common understanding of the problem.
- Somatoform disorders are best managed behaviourally and with cognitive therapy which has shown reductions in somatic symptoms and improved functioning.
Emphasis should always be placed on non-medication management of the somatoform or chronic pain disorder as a first line of treatment\textsuperscript{377}. While non-medication management can be extremely challenging at times, if the resources are available in the general practice setting and the client is willing to engage in behavioural therapy, then this should be offered.

To engage in treatment, the patient needs to have some insight into the problem and be willing to try to approach the problem differently. If this insight cannot be achieved, then a health-system based containment strategy is required.

For further information please refer to:

\textit{Understanding somatisation and somatisation disorders: A handbook for health care workers}\textsuperscript{387}.

### 10.2 Comorbidity with somatoform disorders

- Somatic presentations of underlying mental disorder or distress are extremely common in general practice with somatisation frequently being a way of presenting anxiety and depression\textsuperscript{388}. Many of these presentations are easy to sort out for the clinician, with the underlying stressor or disorder quickly coming to the fore and the patient willing to attribute the physical symptoms to the underlying problem.

- There is a linear relationship between the severity of anxiety and depression and frequency and severity of somatic symptoms\textsuperscript{389-392}.

- There is a high degree of comorbidity with depression and anxiety amongst people with somatoform disorders\textsuperscript{389, 392-398}. A combination of anxiety and depression and a somatoform disorder results in more somatic symptoms than if anxiety or depression alone occurs with the somatoform disorder\textsuperscript{392, 396, 398}. Individuals with somatoform disorders and comorbid depression may use both organic and psychological explanations for their symptoms\textsuperscript{399}.

- Overlap of symptoms of diagnostic criteria for somatoform disorders and anxiety and depression may explain the high prevalence of somatic symptoms in those with anxiety and depression\textsuperscript{392, 400}.

- Anxiety and depression are more likely than somatoform disorders to be the source of medically unexplained symptoms\textsuperscript{401}. Regardless, depression and anxiety make pain feel worse and individuals present with a higher level of functional somatic symptoms\textsuperscript{392, 402}.

- There is obvious scope for inappropriate substance use in these individuals as the medical practitioner attempts to deal with some of the symptomatology before the correct diagnosis is recognised\textsuperscript{377, 403}.

- There are strong correlations between pain disorders and opioid dependence and misuse. However, this does not suggest that all people with pain and opioid dependence have a somatoform disorder.

- Somatoform disorders also correlate with alcohol and benzodiazepine dependence and misuse\textsuperscript{379, 404}.

- Delay in diagnosing these disorders may result in the individuals being prescribed opioids or benzodiazepines with subsequent increased risk of dependence\textsuperscript{404}.
10.2.1 General management approaches to comorbidity

- The challenge is to recognise the diagnosis of somatoform disorder early.
- Psychosocial assessment should be performed prior to treatment with any form of pharmacological treatment \(^\text{405}\).
- Clinicians need to be aware of comorbid anxiety and depression in those with somatoform disorders and manage them accordingly \(^\text{392, 398}\).
- In determining whether the depression is a cause or an effect of chronic pain or somatoform disorders, it should be considered at least a comorbid condition that requires concurrent treatment \(^\text{402}\). Use of antidepressants has been shown to be effective in reducing somatic symptoms in those with depression and anxiety \(^\text{406, 407}\).
- Use of antidepressants may be required for comorbid depression and anxiety \(^\text{**406, 407}\), with tricyclics being useful \(^\text{377}\) in aiding chronic tension headaches and fibromyalgia.
- Understanding the impact of fear, expectations and attention can help physicians deal more effectively with acute pain \(^\text{402}\).
- There is evidence that pain perception seems to be responsive to changes in patient mood, even in people with concomitant substance use \(^\text{**408}\). This supports cognitive approaches to pain management even in substance dependent individuals.
- Cognitive approaches may result in improved quality of life in patients with long-term somatoform disorders \(^\text{398}\).

10.3 Major clinical issues with somatoform disorders and cannabis/hallucinogen use

- There is currently little rigorous evidence to indicate what the role of cannabis might be in managing pain.
- In the absence of other proven forms of treatment, CBT is, at present, the most widely employed form of treatment for cannabis use.
- Somatoform disorders are best managed behaviourally and with cognitive therapy.

10.3.1 Effects of cannabis and other hallucinogens on somatoform disorders

- Cannabis may have a beneficial effect on pain \(^\text{409}\). However, there is currently little rigorous evidence (by way of randomised controlled trials) to indicate what the role of cannabis might be in managing pain \(^\text{410-414}\).
- Despite this, cannabis is one of the most commonly used substances among individuals with somatoform disorders \(^\text{415}\). It may be used by individuals with somatoform or pain disorders in an attempt to alleviate pain or as an antiemetic to relieve nausea associated with opioid use \(^\text{409, 412, 416}\).
10.3.2 Interactions between cannabis and therapeutic agents for somatoform disorders

- Cannabis can exacerbate the sedative effects of tricyclic antidepressants and benzodiazepines which increase the risk of impaired driving and injury as well as overdose.

- Cannabis, benzodiazepines, opioids and antidepressants are metabolised by CYP 450 enzymes which may result in the inhibition or induction of each drug group. Therefore, individuals should be monitored closely to ensure outcomes are appropriate and people are not experiencing increased sedation.

10.3.3 Management approaches for comorbid somatoform disorders and cannabis and other hallucinogen use

- Abstinence from cannabis is a difficult goal to achieve in cannabis dependent people.

- In the absence of other proven forms of treatment, CBT is, at present, the most widely employed form of treatment for cannabis use.

- Somatoform disorders are best managed behaviourally and with cognitive therapy.

- There is currently no research that reports the effect of CBT on both cannabis use and somatoform disorders.

- Use of antidepressants may be required for comorbid depression and anxiety, with tricyclics being useful in aiding chronic tension headaches and fibromyalgia.

10.4 Major clinical issues with somatoform disorders and alcohol use

- Alcohol is one of the most commonly used substances by people with somatoform disorders.

- If alcohol consumption is hazardous or harmful, then the person should be counselled accordingly.

- Look for links between the patient’s symptomatology and alcohol use so that insight can be raised.

- Acamprosate and naltrexone are both effective in the management of alcohol dependence and maintaining abstinence.

10.4.1 Effects of alcohol on somatoform disorders

- Alcohol is one of the most commonly used substances by people with somatoform disorders.

- People with somatoform disorders may self medicate with alcohol to mask pain or to reduce anxiety symptoms, as do people with organic physical pain and primary anxiety disorders.

- Alcohol use and intermittent withdrawal may result in exacerbation of a variety of physical symptoms particularly associated with anxiety.
10.4.2 Interactions between alcohol and therapeutic agents for somatoform disorders

- Benzodiazepines, opioids and antidepressants are metabolised by CYP 450 enzymes which may result in the inhibition or induction of each drug group. Therefore, individuals should be monitored closely to ensure they are receiving the appropriate therapeutic effect and not experiencing increased sedation.*

- Alcohol can exacerbate the sedative effects of any sedative agents (including tricyclic antidepressants and mirtazepine, benzodiazepines and opioids) used in the treatment of somatoform disorders. Alcohol toxicity and risk of overdose may occur through the inhibition of CYPs by sedative antidepressant involved in the metabolism of alcohol* or increase in sedation as a result of combinations of alcohol and benzodiazepines or opioids.*

- Disulfiram and acamprosate used to treat alcohol dependence are unlikely to interact with antidepressants or with opioids if these are being used*.229.

- Acamprosate and benzodiazepines do not appear to interact with one another*.230.

10.4.3 Management approaches to comorbid somatoform disorders and alcohol use

- Individuals with pain disorders may be taking benzodiazepines or opioids*.377, 404.

- If alcohol consumption is hazardous or harmful, then the person should be counselled accordingly.

- Try to raise patient awareness of any links between their symptoms and their alcohol use.

- Somatoform disorders are best managed behaviourally and with cognitive therapy***380-386.

- Alcohol intoxication will interfere with CBT and any structured problem solving or motivational therapy.

- Acamprosate and naltrexone are both effective in the management of alcohol dependence and maintaining abstinence***141, 144, 235, 236.

- If the patient is taking opioid agonists for pain relief, the use of naltrexone to control alcohol consumption will block the therapeutic effect of opioid antagonists***229.

- Antidepressants may be required for comorbid depression and anxiety***406, 407, with tricyclics being useful*377 for aiding chronic tension headaches and fibromyalgia.
10.5 Major clinical issues with somatoform disorders and opioid use

- Emphasis should always be placed on non-medication management of the somatoform disorder as a first line of treatment.
- CBT has shown reductions in somatic symptoms and improved functioning in people with somatoform disorders.
- The patient should be managed with the assistance of a clinical psychologist with experience in the management of pain.
- If exercise and rehabilitation avoidance behaviours are present, then the help of a physiotherapist with experience in the area will be required.
- People with somatoform and pain disorders frequently use opioids. Due to the chronic nature of the pain and subsequent opioid use, dependence is common.
- However, long-term opioid use can result not only in tolerance but can actually cause pain hypersensitivity, potentially exacerbating somatic symptoms.
- Methadone itself has the potential to increase plasma concentrations of benzodiazepines and increase their sedative effects.
- Several deaths have been reported due to benzodiazepine use in conjunction with high dose buprenorphine and may be a result of similar metabolic interactions.
- Fluvoxamine, fluoxetine, norfluoxetine and paroxetine can inhibit buprenorphine and methadone metabolism through inhibition of the CYPs involved in their metabolism.

10.5.1 Effects of opioids on somatoform disorders

- People with somatoform and pain disorders frequently use opioids. Opioids have analgesic, hypnotic and sedative effects – characteristics that are often sought after or are rewarding for patients with somatoform disorders (particularly pain). There is also evidence that opioids are more likely to be prescribed to people with pain who demonstrate anxiety or depression during an interview.
- Due to the chronic nature of the pain and subsequent opioid use, dependence is common.
- However, long-term opioid use can result not only in tolerance but can actually cause pain hypersensitivity, potentially exacerbating somatic symptoms.

10.5.2 Interactions between opioids and therapeutic agents for somatoform disorders

- Opioids, benzodiazepines and antidepressants are metabolised by CYP 450 enzymes which may result in the inhibition or induction of each drug group. Therefore, individuals should be monitored closely to ensure they are receiving the appropriate therapeutic effect and not experiencing increased sedation which may result in impaired driving, injury and, in extreme cases, overdose.
- Combinations of sedative antidepressants such as tricyclics, opioids and benzodiazepines will increase the risk of sedation, overdose, impaired driving and injury.
- Methadone itself has been shown to inhibit CYP3A4, which also metabolises many benzodiazepines. This has the potential to increase plasma concentrations of benzodiazepines and increase their sedative effects.

- Several deaths have been reported due to benzodiazepine use in conjunction with high dose buprenorphine and may be a result of similar metabolic interactions.

- Fluvoxamine, fluoxetine, norfluoxetine and paroxetine can inhibit buprenorphine and methadone metabolism through inhibition of the CYPs involved in their metabolism. This can result in an increase in plasma opioid pharmacotherapy concentrations and potential overdose. This can be a particular issue during induction onto methadone; however, the risk may persist even after stabilisation has occurred.

- Fluvoxamine is the most potent inhibitor of methadone and buprenorphine metabolism and is the most clinically relevant. Therefore, it should be avoided.

- Fluoxetine and paroxetine should also be avoided.

- Citalopram and sertraline are the least likely SSRIs to have cytochrome mediated drug interactions; however, due to the theoretical potential for an interaction, caution should still be used and individuals monitored closely.

10.5.3 Management approaches to comorbid somatoform disorders and opioid use

- Emphasis should always be placed on non-medication management of the somatoform disorder as a first line of treatment when the resources are available and the client is willing to engage.

- CBT has shown reductions in somatic symptoms and improved functioning in people with somatoform disorders.

- The risk of dependence should be assessed if opioids are to be used. Risk factors for dependence include:
  - A personal history of substance dependence.
  - A family history of substance dependence.
  - Age less than 45 years.
  - History of pre-adolescent sexual abuse.
  - Current psychological problems.

- The advice of a specialist pain clinic while optimal, is not always readily available. However, this type of clinic will provide a multi-disciplinary approach to the management of the patient’s pain that is not readily available in general practice.

- If opioid dependence is identified, then this needs to be discussed with the patient and their readiness for change identified.

- The patient should be managed with the assistance of a clinical psychologist with experience in the management of pain.
• If exercise and rehabilitation avoidance behaviours are present, then the help of a physiotherapist with experience in the area will be required.

• If opioid analgesics are used, then:
  – Long-acting opioids are preferable.
  – Daily or weekly dispensing of opioids may assist with controlling use (observed single daily dosing may be required).
  – Use of methadone as part of a formalised program will allow probable control of the pain and the drug-seeking lifestyle.

• Use of antidepressants may be required for comorbid depression and anxiety*** (406, 407) with tricyclics being useful(377), for aiding with chronic tension headaches and fibromyalgia.

### 10.6 Major clinical issues with somatoform disorders and stimulant (including methamphetamine) use

- If stimulants are used to treat symptoms of chronic fatigue, tolerance frequently develops with continued use, and there is a significant risk of developing dependence.

- MAO-Is (either irreversible or reversible) are contraindicated in people using amphetamines or MDMA due to risk of serotonin syndrome. Deaths have been associated with concurrent use of moclobemide and MDMA.

- Brief interventions and motivational interviewing for stimulant use are recommended.

- CBT can be used to address both the stimulant use and the somatoform disorder.

- Antidepressants may be required for comorbid depression and anxiety.

### 10.6.1 Effects of stimulants on somatoform disorders

- Stimulants may cause a variety of sympathetic nervous system related symptoms (421, 422) that may be confused with symptoms of somatoform disorders. However, these are generally short lived, are related to drug intoxication and resolve as drug concentrations decline.

- Evidence regarding the effect of stimulants on fatigue in patients with chronic fatigue syndrome is inconsistent (423-425). However, as symptoms are generally long lived, and tolerance to stimulants frequently develops with continued use, there is a significant risk of developing dependence.

### 10.6.2 Interactions between stimulants and therapeutic agents for somatoform disorders

- MAO-Is (either irreversible or reversible) are contraindicated in people using amphetamines or MDMA due to risk of serotonin syndrome (Appendix 1). Deaths have been associated with concurrent use of moclobemide and MDMA ***(181, 182).***
Stimulant drugs are likely to exacerbate the effects of SSRI and SNRI antidepressants (and vice versa) and may result in serotonin syndrome (Appendix 1)\(^\text{x}^{127, 179, 180}\). Patients should be warned of signs of serotonin syndrome and be monitored.

Fluoxetine, norfluoxetine, paroxetine and sertraline are potential inhibitors of CYP 2D6 which metabolises MDMA and methamphetamine. This may result in elevated plasma concentrations leading to toxicity\(^\text{x}\).

### 10.6.3 Management approaches to comorbid somatoform disorders and stimulant use

- The use of stimulants at any level should be discouraged due to the risk of dependence and most importantly the possibility of increased chances of toxicity. The patient needs to be guided towards this realisation and readiness for change determined.
- Brief interventions and motivational interviewing for stimulant use are recommended.
- CBT can be used to address both the stimulant use\(^\text{***}^{49, 183}\) and the somatoform disorder\(^\text{****}^{380-386}\).
- There are no available studies that have reported the effectiveness of CBT in managing both stimulant use and somatoform disorders.
- Use of antidepressants may be required for comorbid depression and anxiety\(^\text{***}^{406, 407}\) with tricyclics being useful\(^\text{***}^{377}\), for aiding with chronic tension headaches and fibromyalgia.
- Links between the stimulant use and the particular somatoform disorder should be sought.

### 10.7 Major clinical issues with somatoform disorders and benzodiazepine use

- People with somatoform disorders often use benzodiazepines to alleviate anxiety symptoms or to moderate pain, frequently resulting in benzodiazepine dependence.
- Emphasis should always be placed on non-medication management of the somatoform disorder as a first line of treatment.
- CBT has shown reductions in somatic symptoms and improved functioning in people with somatoform disorders.
- In general, use of benzodiazepines should be discouraged due to its dependence potential and psychomotor effects.

### 10.7.1 Effects of benzodiazepines on somatoform disorders

- People with somatoform disorders often use benzodiazepines to alleviate anxiety symptoms or to moderate pain, frequently resulting in benzodiazepine dependence\(^\text{***}^{377, 404}\).
- Short-acting benzodiazepines, in particular, may result in fluctuating plasma concentrations. These may result in exacerbation of anxiety symptoms when levels are low resulting in frequent attendances at health services.
10.7.2 Interactions between benzodiazepines and therapeutic agents for somatoform disorders

- Benzodiazepines, opioids and antidepressants are metabolised by CYP 450 enzymes which may result in the inhibition or induction of each drug group. Therefore, individuals should be monitored closely to ensure they are receiving the appropriate therapeutic effect and not experiencing increased sedation which may result in impaired driving, injury and, in extreme cases, overdose.

- Methadone itself has been shown to inhibit CYP3A4 which also metabolises many benzodiazepines. This has the potential to increase plasma concentrations of benzodiazepines and increase their sedative effects.

- Several deaths have been reported due to benzodiazepine use in conjunction with high dose buprenorphine and may be a result of similar metabolic interactions.

- Fluvoxamine, fluoxetine, norfluoxetine and paroxetine can inhibit buprenorphine and methadone metabolism through inhibition of the CYPs involved in their metabolism. This can result in an increase in plasma opioid pharmacotherapy concentrations and potential overdose. This can be a particular issue during induction onto methadone; however, the risk may persist even after stabilisation has occurred.

- Fluvoxamine is the most potent inhibitor of methadone and buprenorphine metabolism and is the most clinically relevant, therefore, it should be avoided.

- Fluoxetine and paroxetine should also be avoided.

- Citalopram and sertraline are the least likely SSRIs to have cytochrome mediated drug interactions; however, due to the theoretical potential for an interaction, caution should still be used and individuals monitored closely.

10.7.3 Management approaches to comorbid somatoform disorders and benzodiazepine use

- Emphasis should always be placed on non-medication management of the somatoform disorder as a first line of treatment when the resources are available and the client is willing to engage.

- CBT has shown reductions in somatic symptoms and improved functioning in people with somatoform disorders.

- In general, use of benzodiazepines should be discouraged due to its dependence potential and psychomotor effects.

- If large quantities of benzodiazepines (e.g. 40mg diazepam daily equivalent) are being consumed, then inpatient withdrawal to lower levels should be considered to avoid and manage seizure risk.

- If dependence has developed, then graduated withdrawal through slow reduction of dosage should be commenced, possibly after transferring the patient onto a long acting benzodiazepine.

- If long-term benzodiazepine use is indicated, then:
  - This should be subject to a contract with the patient.
  - Authorities should be advised, including registration with the relevant local government health authority.
The seeking of additional benzodiazepines from other prescribers should be monitored (e.g. using the Authority to release personal PBS claims information to a third party form).

Daily or weekly dispensing of benzodiazepines should be considered and may assist with controlling use.

- If the person is ready for change and willing to engage in CBT specifically for their somatoform disorder, then minimisation of benzodiazepine dosage is required so that the CBT can have greater effectiveness.
- Benzodiazepines are frequently prescribed to induce ‘muscle relaxation’. However, large doses are often required (up to 40mg diazepam equivalents per day) which will not be conducive to rehabilitation.
- Use of antidepressants may be required for comorbid depression and anxiety, with tricyclics being useful for aiding chronic tension headaches and fibromyalgia.

10.8 **Major clinical issues with somatoform disorders and inhalant/solvent use**

10.8.1 **Effects of inhalants/solvents on somatoform disorders**

- There is a dearth of information concerning reports of comorbid inhalant use and somatoform disorders.
- It is likely that the two conditions do not often co-exist because inhalant and solvent use occurs more commonly in younger people and somatoform disorders more frequently occur in older people.

10.8.2 **Interactions between inhalants/solvents and therapeutic agents for somatoform disorders**

- The sedative effects of antidepressants, opioids and benzodiazepines may be exacerbated by inhalants and may possibly result in severe sedation and overdose.

10.8.3 **Management approaches to comorbid somatoform disorders and inhalant/solvent use**

- There appears to be no literature that sheds light on managing people with both somatoform disorders and problems relating to inhalant/solvent use.
- As with most other substances, inhalant users should be encouraged to try and reduce or cease use.
- In general, with respect to inhalant/solvent use:
  - Outline the harms associated with inhalant/solvent use.
  - Investigate polysubstance use as this is common.
• Standard CBT approaches to both sets of issues should be used, with particular attention to the development of:
  – Assertiveness skills (refusal skills).
  – Coping skills for controlling and managing emotions such as anger and sadness.

• Offer alternatives to inhalant use, for example, recreational activities.

• Community reinforcement approaches should be developed by mobilising the local health and welfare service system in individual care plans.

• Family interventions need to be considered, for example, increasing communication between the person and the family.

• Assertive outreach and follow-up may be required.