**Supporting documents for: Ketamine Awareness for Key Stage 3 Pupils**

**What is Ketamine?**

**Medical Use**: Ketamine is a powerful anaesthetic that is widely used in medical settings. It was originally developed in the 1960s and has since become a valuable tool for healthcare professionals. Here are some key points about its medical use:

* **Anaesthetic Properties**: Ketamine is primarily used as an anaesthetic for both humans and animals. It is known for its ability to induce a trance-like state while providing pain relief, sedation, and memory loss.
* **Pain Relief**: In addition to its anaesthetic properties, ketamine is also used for pain management. It is particularly effective in treating severe pain that does not respond well to other medications.
* **Sedation**: Ketamine is often used to sedate patients during surgical procedures, especially in emergency situations where rapid sedation is required. It is also used in smaller doses to manage pain and discomfort in patients undergoing minor procedures.
* **Mental Health Treatment**: Recently, ketamine has gained attention for its potential use in treating mental health conditions such as depression and PTSD. Low doses of ketamine have been found to have rapid antidepressant effects in some patients.

Ketamine's unique properties make it a versatile and important medication in various medical contexts. However, it is also important to be aware of the risks associated with its misuse outside of medical supervision.

**Recreational Use**: Ketamine, originally developed as an anaesthetic, is sometimes used recreationally due to its dissociative and hallucinogenic effects. When used outside of medical supervision, it can lead to various risks and health issues.

**Reasons for Misuse**:

1. **Dissociative Effects**: Ketamine can cause feelings of detachment from reality, often described as an "out-of-body" experience. This dissociative state can be appealing to those seeking an escape from stress or reality
2. **Hallucinations**: Users may experience vivid hallucinations, which can be intriguing or enjoyable for some individuals
3. **Euphoria**: At lower doses, ketamine can induce feelings of euphoria and relaxation, making it attractive for recreational use
4. **Peer Pressure**: Social environments, such as parties or clubs, can encourage ketamine use as part of the experience, especially among young people
5. **Curiosity**: Some individuals may try ketamine out of curiosity, wanting to explore its effects first-hand

**Risks of Recreational Use**:

* **Health Risks**: Misuse of ketamine can lead to severe health issues, including bladder and kidney damage, cognitive impairments, and addiction
* **Mental Health**: Regular use can increase the risk of mental health problems, such as anxiety, depression, and psychosis
* **Legal Consequences**: Possession and use of ketamine without a prescription are illegal, leading to potential legal trouble

Understanding these risks is crucial for making informed decisions and seeking help if needed. If you or someone you know is struggling with ketamine misuse, it's important to reach out to professionals for support.

**Short-term Effects of Ketamine Use**

Ketamine, when used recreationally, can produce a range of immediate effects that can vary in intensity depending on the dose and the individual. Here are some of the common short-term effects:

1. **Hallucinations**: Users may experience vivid visual and auditory hallucinations. These can range from pleasant and dream-like to disturbing and frightening
2. **Dissociation**: Ketamine can cause a sense of detachment from reality, often described as an "out-of-body" experience. This dissociative effect can make users feel disconnected from their surroundings and themselves
3. **Impaired Motor Function**: The drug can significantly impair motor skills, leading to difficulties in coordination and movement. Users may appear clumsy or unsteady on their feet
4. **Confusion and Disorientation**: Ketamine can cause confusion and disorientation, making it difficult for users to think clearly or understand their environment
5. **Increased Heart Rate and Blood Pressure**: The drug can cause a temporary increase in heart rate and blood pressure, which can be dangerous for individuals with pre-existing heart conditions
6. **Nausea and Vomiting**: Some users may experience nausea and vomiting, especially at higher doses
7. **Euphoria and Relaxation**: At lower doses, ketamine can induce feelings of euphoria and relaxation, which is one reason it is used recreationally

These effects typically begin within minutes of use and can last for about an hour, though some effects may linger longer. It's important to note that the unpredictability of these effects can make ketamine use particularly risky.

**Long-term Effects of Ketamine Use**

Ketamine misuse can lead to several serious long-term health risks. Here are some of the most significant ones:

**Bladder and Kidney Damage**:

* **Bladder Issues**: Chronic ketamine use can cause a condition known as "ketamine bladder syndrome" or "ketamine cystitis," which includes symptoms like severe bladder pain, frequent urination, and incontinence
* **Kidney Damage**: Long-term use can also lead to kidney damage, which may result in chronic kidney disease and impaired kidney function

**Cognitive Impairment**:

* **Memory Problems**: Regular ketamine use can impair both short-term and long-term memory. Users may find it difficult to recall recent events or learn new information
* **Cognitive Decline**: Prolonged use can lead to broader cognitive deficits, affecting attention, problem-solving skills, and overall mental function

**Addiction**:

* **Dependence**: Ketamine has addictive properties, and users can develop a psychological dependence on the drug. This means they may feel compelled to use it regularly despite knowing the risks
* **Tolerance and Withdrawal**: Over time, users may need higher doses to achieve the same effects, leading to increased risk of overdose. Withdrawal symptoms can include cravings, anxiety, and depression

**Interactive Discussion**: **Case Study 1: Mark's Struggle with Ketamine Misuse**

**Background**: Mark, a 19-year-old college student, started using ketamine at parties. Initially, he used it occasionally to fit in with his friends and escape academic pressures. Over time, his use became more frequent.

**Impact**:

* **Health Issues**: Mark began experiencing severe bladder pain and frequent urination, symptoms of ketamine bladder syndrome. He also had memory problems and difficulty concentrating.
* **Academic Decline**: His grades dropped significantly as he struggled to keep up with his coursework.
* **Social Isolation**: Mark's relationships with friends and family deteriorated. He became increasingly isolated and withdrawn.

**Resolution**:

* **Seeking Help**: After a severe episode of bladder pain, Mark sought medical help and was diagnosed with ketamine bladder syndrome. He also started attending counselling sessions to address his addiction.
* **Recovery**: With support from healthcare, specialist substance professionals and his family, Mark gradually reduced his ketamine use and focused on his recovery. He joined a support group for young people dealing with substance misuse.

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**Case Study 2: Sarah's Journey to Recovery**

**Background**: Sarah, a 23-year-old graphic designer, began using ketamine recreationally to cope with stress and anxiety. Her use escalated from occasional weekends to daily consumption.

**Impact**:

* **Mental Health**: Sarah experienced severe anxiety, depression, and dissociative episodes. She also had multiple suicide attempts.
* **Professional Life**: Her work performance declined, leading to job loss. She struggled to find new employment due to her addiction.
* **Legal Trouble**: Sarah was caught with ketamine and faced legal consequences, including a court-mandated rehabilitation program.

**Resolution**:

* **Rehabilitation**: Sarah entered a comprehensive rehabilitation program where she received medical treatment and therapy. She learned coping strategies to manage her anxiety and stress without relying on drugs.
* **Support Network**: With the help of her family, friends, and support groups, Sarah rebuilt her life. She found a new job and continued to attend therapy sessions to maintain her sobriety.

**Discussion Questions**

1. **What were the main factors that led Mark and Sarah to start using ketamine?**
2. **How did ketamine misuse affect their health, relationships, and daily lives?**
3. **What steps did they take to seek help and begin their recovery?**
4. **Why is it important to have a support network when dealing with substance misuse?**
5. **What can you do if you or someone you know is struggling with substance misuse?**

These case studies can help students understand the real-life impact of ketamine misuse and the importance of seeking help. Encourage students to discuss these scenarios in small groups and share their thoughts.

**Health Risks of Ketamine Misuse**

**Physical Health Risks**:

**Bladder and Kidney Damage**:

* **Ketamine Bladder Syndrome**: Chronic use can lead to severe bladder issues, including pain, frequent urination, and incontinence. This condition, known as ketamine bladder syndrome, can significantly impact quality of life.
* **Kidney Damage**: Long-term use can also cause kidney damage, potentially leading to chronic kidney disease and impaired kidney function.

**Respiratory Problems**:

* **Breathing Difficulties**: High doses of ketamine can depress the respiratory system, leading to breathing difficulties and, in extreme cases, respiratory failure.

**Cardiovascular Issues**:

* **Increased Heart Rate and Blood Pressure**: Ketamine can cause a temporary increase in heart rate and blood pressure, which can be dangerous for individuals with pre-existing heart conditions.

**Gastrointestinal Problems**:

* **Nausea and Vomiting**: Users may experience nausea and vomiting, especially at higher doses.

**Mental Health Risks**:

**Cognitive Impairment**:

* **Memory Problems**: Regular ketamine use can impair both short-term and long-term memory, making it difficult to recall recent events or learn new information.
* **Cognitive Decline**: Prolonged use can lead to broader cognitive deficits, affecting attention, problem-solving skills, and overall mental function.

**Mental Health Disorders**:

* **Anxiety and Depression**: Chronic use can exacerbate or contribute to the development of anxiety and depression.
* **Psychosis**: High doses or prolonged use can lead to psychotic symptoms, including hallucinations and delusions.

**Addiction**:

* **Dependence**: Ketamine has addictive properties, and users can develop a psychological dependence on the drug. This means they may feel compelled to use it regularly despite knowing the risks.
* **Tolerance and Withdrawal**: Over time, users may need higher doses to achieve the same effects, leading to increased risk of overdose. Withdrawal symptoms can include cravings, anxiety, and depression.

**Legal Consequences of Ketamine Possession and Use in the UK**

In the UK, ketamine is classified as a **Class B drug** under the Misuse of Drugs Act 1971.This classification means that it is illegal to possess, produce, or supply ketamine without a prescription. Here are the key legal implications:

**Possession**:

* **Penalties**: If you are caught in possession of ketamine without a prescription, you could face up to **5 years in prison**, an **unlimited fine**, or both

**Supply and Production**:

* **Penalties**: Supplying or producing ketamine can result in much harsher penalties, including up to **14 years in prison**, an **unlimited fine**, or both

**Legal Use**:

* **Medical Use**: Ketamine is still legally used in medical settings for its anesthetic and pain-relief properties. Licensed practitioners can prescribe and administer ketamine under strict regulations

**Role-Playing Activity: Approaching a Friend about Ketamine Misuse**

**Objective**: To help students practice how to approach a friend they are concerned about and suggest seeking help for ketamine misuse.

**Instructions:**

**Pair Up**: Divide the students into pairs. Each pair will take turns playing the roles of the concerned friend and the friend who may be misusing ketamine.

**Scenario Setup**: Provide each pair with a scenario to guide their role-play.

**Scenario**: You have noticed that your friend has been using ketamine more frequently and it’s starting to affect their health and behaviour. You are worried about them and want to talk to them about seeking help.

**Role-Play**: Each pair will act out the conversation. Encourage them to focus on being supportive, non-judgmental, and empathetic. Here are some key points to include:

**Express Concern**: Start by expressing your concern in a caring and non-judgmental way.

* Example: “Hey [Friend’s Name], I’ve noticed that you’ve been using ketamine a lot lately, and I’m really worried about you.”

**Share Observations**: Mention specific changes you’ve noticed in their behaviour or health.

* Example: “You’ve seemed really different lately, and I’ve seen you struggling with your health and schoolwork.”

**Offer Support**: Let them know you are there to support them and suggest seeking help together.

* Example: “I care about you and want to help. Maybe we can talk to a teacher or pastoral worker or find a specialist service together?”

**Listen**: Allow your friend to share their thoughts and feelings. Be a good listener and show empathy.

* Example: “I’m here to listen. How are you feeling about everything?”

**Switch Roles**: After a few minutes, have the pairs switch roles so each student gets a chance to practice both parts.

**Group Discussion**: After the role-play, bring the class back together for a group discussion. Ask the following questions:

* + How did it feel to approach your friend about their ketamine use?
  + What strategies worked well in the conversation?
  + What challenges did you face, and how did you overcome them?
  + How can you apply these skills in real-life situations?

**Reflection:**

Encourage students to reflect on the importance of supporting friends who may be struggling with substance misuse and the value of seeking help from trusted adults or professionals.

This activity can help students develop empathy and communication skills, making them better equipped to support their peers. If you need more information or additional resources, let me know!