



## Discussion Continuum 2:

# Access to treatment

### Introduction:

When it comes to medicine, are we responsible consumers? Are complementary and alternative medicines a valid choice for patients? What are the ethics of vaccination programmes? This resource gives young people the opportunity to investigate issues such as overmedicalisation, vaccination and complementary and alternative medicine, and asks them to consider a number of statements and situations concerning the social and ethical issues surrounding access to medical treatment.

Groups of 8-12 students discuss the issues raised by each statement and choose where each card should go between 'agree' and 'disagree'. Larger groups could use the resource to have a free discussion of the topic or you could use formats that require the students to work more formally or in smaller groups.

### Contents:

The resource consists of:

- An AGREE and a DISAGREE card
- 12 Discussion Cards, which include a statement on some aspect of drug development and access, and if appropriate some further information
- 6 Info Cards, containing more detailed information on elements referred to by the discussion cards

## **Gameplay:**

1. Players form small groups, up to 12 per group. Each group is given an AGREE and DISAGREE card and 12 discussion cards.
2. Within each group, the AGREE card and DISAGREE card are placed on the floor/table about one metre apart, to represent the two extremes of the continuum. The space in between is where the discussion cards will be placed.
3. The first player reads the first discussion card to the rest of the group. The player should check everyone understands the card, and use information sheets where necessary to ensure the group understands the statement.
4. The first player then decides to what extent s/he agrees with the first card. S/he places the card face up, anywhere on the discussion continuum, closer to AGREE or DISAGREE as s/he chooses. This is entirely the choice of the individual player, and is not discussed by the group. The player can give a reason, if s/he wishes.
5. Each player in turn then reads a card, checks that everyone understands, and chooses individually where to place it on the continuum in a similar way.
6. When all the cards have been read, understood and placed on the continuum, the discussion begins. The aim is to place the cards between AGREE and DISAGREE in an order that most of the players agree on. Players should pick a card for discussion, and debate whether to move it.
7. At the end of the discussion, each group should have a continuum which they mostly agree with.
8. If several groups are playing at the same time, the facilitator may wish to bring the different groups' results together. Are they similar? Can someone from each group explain their choices on particular cards?

Discussion continuum developed by Ecsite, in collaboration with Barcelona Science Park, in the context of the Xplore Health project.

Thanks to At-Bristol for the development of the discussion continuum format: [www.at-bristol.org.uk](http://www.at-bristol.org.uk)

**Agree**

**Disagree**

## Discussion cards

*Text in bold is the “statement” which the player can agree or disagree with. Text in italics is additional information. For even more additional information, players can refer to Info cards.*

**“Antibiotics should never be sold over the counter in pharmacies without a prescription.”**

*Antibiotics are medicines that kill bacteria which cause infection. They are used to treat a wide range of bacterial infections, but strains of bacteria can become resistant to the treatment. For more information, see Info Card A.*

**“People rely too much on medicine to keep healthy, and not enough on a balanced diet, regular exercise, avoiding tobacco and alcohol, and mental well-being.”**

*Studies show that factors like diet and exercise play an important role in keeping us healthy. But they cannot prevent all types of disease.*

**“People are too quick to take painkillers at any opportunity. The government should run campaigns to encourage people to rely less on painkillers.”**

*Painkillers like paracetamol are commonly recommended for aches and pains. However, if the recommended dose is exceeded, some types of painkiller can cause acute liver damage. For more information, see Info Card B.*

**“Doctors who are funded by the government should be trained to prescribe complementary and alternative medicine and refer their patients to alternative therapies when necessary.”**

*Types of complementary and alternative treatment include herbalism, homeopathy, acupuncture and hypnosis.*

**“If a new vaccine is developed for a disease, and proven to be safe, effective and not too expensive, it is the government’s obligation to ensure as many people as possible receive that vaccine.”**

*In order to eradicate a disease, it is necessary to immunise a large percentage of the population. But many feel that immunisation campaigns limit people’s choice, and that more information should be available to help people choose.*

**“Parents should have the right to choose whether they have their children vaccinated against diseases like mumps.”**

*Mumps is a highly contagious viral infection that usually affects children. Vaccination is an effective way to ensure that this infectious disease does not spread. But many parents are concerned about the effects of vaccinations on their children’s immune system.*

**“The government should not pay big pharmaceutical companies to ensure the population is vaccinated against flu.”**

*Pharmaceutical companies have the capacity to research, develop and manufacture vaccines. But many are concerned that at times, for example during the avian flu epidemic, they have too much influence on government public health campaigns. For more information, see Info Card C.*

**“Conventional medicine has not been successful in treating my arthritis. I think that if I want to try an alternative therapy like acupuncture, my expenses should be reimbursed.”**

*Arthritis is a common condition that causes pain and inflammation (swelling) of the joints and bones. There is no cure, but medication can help to relieve the symptoms. For more information, see Info Card D.*

**“When homeopathic tablets are sold in pharmacies, they should be obliged to clearly state on the label that they are not clinically proven to work.”**

*Critics of homeopathy say there is no clinical evidence from medical trials to show that homeopathy is effective. Supporters of homeopathy argue that the way medical trials are run means that they are inherently at odds with the way that homeopathy works. For more information, see Info Card E.*

**“Alternative medicine should be subject to the same clinical trials as conventional medicine. If a treatment cannot be proven to work better than a placebo, it should not be sold as medicine.”**

*A placebo is the unusual psychological effect that sometimes occurs when a person is given a 'dummy' medication. They feel better after taking the pill because they think that they are being given real medication. See Info Card F.*

**“A patient refused a cheap conventional treatment for early stage breast cancer, and followed an alternative therapy. Now her cancer has got worse, I don't think she should be entitled to reimbursement for chemotherapy.”**

*There is no clinical evidence that alternative therapies are effective in treating cancer. Complementary therapies are designed to complement conventional treatment, but not replace it.*

**“The government should fund research into complementary and alternative treatment, not just conventional medicine.”**

*Types of complementary and alternative treatment include herbalism, homeopathy, acupuncture and hypnosis.*

# Info Card A:

## Antibiotics and resistance

Antibiotics are medicines that kill bacteria which cause infection. They can be used to treat a wide range of bacterial infections, such as tonsillitis and scarlet fever. Common antibiotics include penicillin.

Patients must always finish taking a prescribed course of antibiotics, even if they feel better, unless a healthcare professional tells them otherwise. If a patient stops taking an antibiotic part way through a course, the bacteria can become resistant to the antibiotic. The infection could then be harder to treat in future.

### **Drug-drug interaction**

When two or more medicines are taken at the same time, the effects of one of the medicines can be altered by the other. This is known as a drug-drug interaction. Antibiotics can sometimes interact with other medicines – for example, penicillins may cause the combined oral contraceptive pill to be less effective at preventing pregnancy.

### **Resistance**

Bacteria can adapt and find ways to survive the effects of an antibiotic. They become antibiotic resistant, which means that the antibiotic no longer works. The more we use antibiotics, the more likely it is that bacteria will become resistant to them. Some bacteria that cause infections in hospitals, such as MRSA, are resistant to several antibiotics.

Other antibiotics can then be used, but they may not be as effective and they may have more adverse effects. And eventually, the bacteria will become resistant to them too. We cannot be sure that we will continue to find new antibiotics to replace the old ones. In recent years, fewer and fewer new antibiotics have been discovered.

Source: NHS UK website

[http://www.cks.nhs.uk/patient\\_information\\_leaflet/antibiotics\\_penicillins](http://www.cks.nhs.uk/patient_information_leaflet/antibiotics_penicillins)

# Info Card B:

## Overmedicalisation

Recommendations from global health organisations such as the World Health Organisation always call for a combination of drug treatment with the practice of health habits such as diet, regular exercise, etc. Certain conditions like genetic disorders or leukaemia will not improve or be cured by diet and exercise alone; they need specific treatments.

### Side effects

But all drugs have unwanted side effects which are impossible to avoid. The higher the consumption, the greater the risks. Any product administered in sufficiently high quantities or in a continuous or repeated dose can eventually become toxic. Prolonged consumption of certain drugs may lead to toxicity, although most are eliminated by the body, and so do not accumulate.

### Anti-inflammatory drugs

Anti-inflammatory agents are the drugs which are the most commonly prescribed and which tend to be taken over longest periods. Most anti-inflammatory drugs cause alterations in the stomach lining which can lead to ulcers. Because of this, it is recommended to also take a gastric protector when taking certain anti-inflammatory drugs.

### Painkillers

If consumed in high doses and over long periods, drugs that contain the widely known paracetamol as their active ingredient can cause damage to the liver. Thanks to drug discovery and development, there are several other painkillers available with reduced side effects for people who have liver problems; doctors would recommend these alternative treatments appropriately.

*Source: How are drugs developed? Ethical, legal and social aspects. Dr. Albert Royes, Dr. Jordi Quintana [www.xplorehealth.eu](http://www.xplorehealth.eu)*

# Info Card C:

## Influenza vaccine

Seasonal flu is a highly infectious respiratory illness caused by a flu virus. It spreads rapidly through the coughs and sneezes of infected people.

### **The flu vaccine**

Seasonal flu immunisation, or the flu jab, is the injection of a vaccine against flu. It gives good protection from flu that lasts for one year. The flu jab is typically offered to people in at-risk groups, who are at greater risk of developing serious complications from flu. To stay protected, they need to have it every year.

The flu vaccines currently available give 70-80% protection against infection, with flu virus strains closely matching those in the vaccine.

### **How the vaccine is made**

The seasonal flu vaccine contains different types of flu virus, which are grown in hens' eggs. They are then inactivated (killed) and purified before being made into the vaccine. Because the flu virus is continually changing and different types circulate each winter, a new flu vaccine has to be produced each year.

### **How decisions are taken**

The World Health Organization (WHO) decides each February which three flu viruses are likely to be the greatest threat that year. The decision is made by analysing several thousand flu viruses in the WHO flu laboratories around the world.

### **How the vaccine works**

About a week to 10 days after you have had the flu injection, your body starts making antibodies to the virus in the vaccine. Antibodies are proteins that recognise and fight off germs that have invaded your blood, such as viruses. They help protect you against any similar viruses you then come into contact with. The flu virus changes every year, so you need to have a flu jab annually to make sure that you are protected against the latest strain of the virus

Source: NHS Choices:

[www.nhs.uk/Conditions/Flu-jab/Pages/Introduction.aspx](http://www.nhs.uk/Conditions/Flu-jab/Pages/Introduction.aspx)

# Info Card D:

## Arthritis

Arthritis is a common condition that causes pain and inflammation (swelling) of the joints and bones. The main symptoms include pain, stiffness, restricted movements of the joints, inflammation and swelling.

Over 100 million people in Europe have a form of arthritis - more than any other chronic medical condition. The two most common forms of arthritis are osteoarthritis and rheumatoid arthritis.

### Treatments

There is no cure for arthritis, but there are a number of treatments that can help to slow down the condition's progress. Medication can help to relieve the symptoms of arthritis and, in severe cases, surgery may be recommended.

For osteoarthritis, analgesics (painkillers), non-steroidal anti-inflammatory drugs, and corticosteroids are often prescribed. In very severe cases, surgical procedures may be recommended.

In treating rheumatoid arthritis, the aim is to slow down the condition's progress and minimise joint damage. Treatments that may be recommended for rheumatoid arthritis include painkillers, disease modifying anti-rheumatic drugs, physiotherapy and regular exercise.

### Complementary therapies

Some people find that complementary therapies can ease the discomfort and pain caused by arthritis. There are also complementary therapies that reportedly improve flexibility and mobility.

Most of the evidence regarding the beneficial effects of complementary therapies for treating the symptoms of arthritis is anecdotal and hasn't been clinically proven to be effective.

# Info Card E:

# Homeopathy

Homeopathy is a type of complementary and alternative medicine (CAM). CAMs are treatments that are not based on conventional scientific theories.

Homeopathy was devised by a German doctor called Samuel Hahnemann during the 1790s. Hahnemann had a series of ideas that evolved into the principles of homeopathy.

## **Like cures like**

The first idea was that a substance that would cause symptoms in a healthy person can be used to cure the same symptoms in someone who is ill. For example, if somebody has insomnia, they can be treated with a homeopathic remedy that contains extracts of coffee.

## **Potentiation**

Hahnemann's second idea is that the more you dilute a substance, the more you increase its power to treat symptoms that it would otherwise cause.

## **Succussion and proving**

Hahnemann stated that to be effective, the process of dilution had to be performed in a very specific manner. For example, a substance such as the belladonna herb should be diluted in water or alcohol in a glass. The vessel should then be shaken firmly 10 times. The process of dilution and shaking is then repeated multiple times. Some homeopathic remedies are diluted by one drop in 100, 30 times over, so the substance is highly diluted in the final solution. This process is known as succussion.

During the succussion process, a group of volunteers will take six doses of the remedy at different dilutions over the course of two days. They will record any mental or physical symptoms in a diary. Each person's diary is then collated into a list of symptoms called a repertory. This process is known as 'proving'. Therefore, a homeopath will try to match your symptom to one that is caused by a remedy during the proving process.

*Source: NHS Choices UK:*

<http://www.nhs.uk/Conditions/Homeopathy/Pages/Introduction.aspx>

# Info Card F:

## Alternative medicine and clinical trials

Critics of alternative medicine argue that there is a lack of conclusive clinical evidence from medical trials to show that these treatments are effective. For example, a study published in *The Lancet* in 2005 looked at more than 100 clinical trials and found no evidence that homeopathy worked any better than a placebo.

### Placebo effect

A placebo is the unusual psychological effect that sometimes occurs when a person is given a 'dummy' medication, such as a sugar pill. They feel better after taking the pill because they think that they are being given real medication. Supporters of homeopathy have argued that most medical trials are run in a way that makes them inherently at odds with the way homeopathy works.

### How medical trials work

Most medical trials are what are known as double-blind randomised control trials.

In simple terms, if you wanted to test a new medication for migraines, you would sign up 200 people: 100 people would get an existing medication and the other 100 would get the new medication.

Neither those taking part in the trial, nor the researchers who are running the trial, would know who was getting the old medication or who was getting the new medication until after the trial had finished. This is known as 'double-blinding', and it is done to reduce the risk of bias.

After the test groups have received their medication, the researchers use a standardised scale to record the pattern of everyone's symptoms. At the end of the trial, the scores are added up to determine which medication worked best.

Source: NHS Choices UK:

[http://www.cks.nhs.uk/patient\\_information\\_leaflet/homeopathy](http://www.cks.nhs.uk/patient_information_leaflet/homeopathy)