

## *Complementary versus Conventional medicine - what do you think?*

### *Introduction*

Forty years ago, anyone admitting to using an alternative therapy to cure or alleviate the symptoms of an illness would have probably been regarded as very odd indeed. Modern medicines, especially the powerful antibiotics that had been developed during the Second World War, were curing all manner of previously untreatable conditions and there really did seem to be 'a pill for every ill'! Things are a bit different now, and many conventionally trained health professionals are also trained in some form of complementary or alternative therapy. An appreciation that many conventional treatments and medicines have their origins in 'home remedies' and herbal preparations has also eased CAM into the mainstream.

### *Learning outcomes*

Different therapies are regarded by the public and the health professions in different ways. Some, like physiotherapy have long been regarded as 'mainstream' while others, like hypnotherapy, are still regarded by some as stage show entertainment with little clinical benefit. What does your class think? Having completed the introductions to different therapies and the scientific basis behind them, students should have a fair idea of how 'accepted' different therapies are. They will also have formed their own opinions from personal experience and anecdotal evidence. The aim is for students to decide where on a 'continuum of convention' these lie. It is important for all to realise there is no 'right answer' to this exercise, and that time and fashion have probably as much to do with where they place each therapy as its effectiveness does. If students have not heard of a therapy, put it to one side and get them to find out about it before the next lesson.

### *Timing*

This activity would probably take about 20 minutes, depending on the degree of debate entered into.

### *Teaching method and resources*

Listed below are a number of therapies and treatments. The continuum is simply a horizontal line drawn with 'Complementary' at one end and 'Conventional' at the other. Students must be familiar with these terms and understand the concept of a continuum before they can place the labels. You could do this as an individual or small group exercise, with the 'continuum' drawn on a large piece of paper and the labels stuck down, or as a class exercise with the continuum drawn on the board and the labels attached with blu-tack or magnets by students coming to the board. You could allow the rest of the class to provide 'higher' or 'lower' type encouragement to the 'sticker' as they place their label. Students are unlikely to agree on many of the placings and the number of students in the class and the degree to which they debate/argue will determine your decision on the learning method!

Reproduce the labels to a suitable size for the method you chose and add any additional ones you or the students come up with.

#### *References*

**Textbook**  
Chapter 5

**Specification**  
9.4 Alternative medicine

Physiotherapy	Occupational therapy
Massage	Traditional Chinese herbal medicine
Kinesiology	Cognitive behavioural therapy
Chiropractic	Hypnotherapy
Accupuncture	Reflexology
Aromatherapy	Crystal therapy
Nutritional therapy	Osteopathy
Homeopathy	Chiropody and podiatry
Auricular therapy	Optometry

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***Evaluating the effectiveness of a treatment or therapy – some words and phrases***

<b>Term</b>	<b>Definition or description</b>
Placebo	A ‘non-treatment’ that an individual is given to ‘treat’ a condition. This individual is normally acting as a control to another who is given an active treatment.
‘Placebo effect’	An improvement in the condition of someone who was given a placebo. As they did not receive an active treatment, the improvement must be caused by psychological benefits of <u>thinking</u> they were being treated.
Feasibility study	A preliminary small scale run-through of a study to ensure that the techniques and processes are possible and likely to yield meaningful data. The final methodology may be altered in the light of a feasibility study.
Single blind study	An investigation where the subjects do not know if they are receiving the active or placebo treatment, but the experimenter does.
Double blind study	An investigation where neither the subject nor the experimenter knows whether the subject is receiving the placebo or active treatment. This reduces the experimenter effect.
Repeated measures study	An investigation when subjects experience all possible conditions or treatments, and each subject acts as their own control. For example, they might spend two weeks on the placebo treatment, followed by two weeks on the active treatment and be assessed after each period.
Independent groups study	An investigation where subjects experience only one condition, and are compared to another matched group of subjects who experience the other condition/s. For example, one group may have the placebo and act as the control group, and the other group have the active treatment. Difficulties lie in accurately matching the groups so they can be compared.
‘Rigorous clinical trial’	A replicable, accurate and valid investigation of the effectiveness of a treatment, carried out on a large group of subjects. The method of assessing improvements in the condition must be as objective as possible.
Side effects	Effects, often unwanted or unpleasant, that are caused by a treatment being taken for another condition. For example, one of the side effects of taking the contraceptive pill can be weight gain.
Objective measures	Evidence or results from an investigation that are absolute and not open to interpretation, and are usually made using some form of measuring equipment. For example, a set of scales would provide an objective measure of body mass.
Subjective measures	Evidence or results from an investigation that are based on someone’s opinion. For example, a person might be asked how relaxed they feel on a scale of 1 – 5 after having a treatment. This is subjective, as it is their opinion. An objective measure of relaxation might be to use an electromyograph (EMG) to measure muscle tension.
Anecdotal evidence	Evidence that comes from a few individuals, who are unlikely to be part of a controlled experiment, and that is often self-reported and then propagated in general conversation. For example, “My mum had acupuncture for her bad back and it made it worse, not better!”
Empirical evidence	Literally, evidence gained ‘through our senses’. The term is usually used to mean evidence (results, observations etc) obtained through carrying out scientific experiments.

*Evaluating the effectiveness of a treatment or therapy – a reminder of some words and phrases*

<b>Term</b>	<b>Definition or description</b>
Placebo	
'Placebo effect'	
Feasibility study	
Single blind study	
Double blind study	
Repeated measures study	
Independent groups study	
'Rigorous clinical trial'	
Side effects	
Objective measures	
Subjective measures	
Anecdotal evidence	
Empirical evidence	
Meta-analysis	