

Messages that ignore harms

From: [Key Concepts for assessing claims about treatment effects and making well-informed treatment choices \(Version 2022\)](#)

1.1a Do not assume that treatments are safe.

Explanation

People often exaggerate the benefits of treatments and ignore or downplay potential harms. However, few effective treatments are 100% safe. Similarly, people in need or desperation hope that treatments will work, and they may ignore potential harms – especially when reliable evidence of treatment effects is lacking. As a result, they may waste time, money, or both on treatments that have never been shown to be useful and may cause harm. The harm that is caused may be minor, but treatments also sometimes cause serious, irreversible harms, including death.

Even simple advice can sometimes cause serious harm. For example, in many countries, parents and health professionals were led to believe that babies should be put to sleep on their tummies, so that they would not choke if they puked. However, researchers looking into possible causes of unexplained deaths during infancy found that babies who had died were more likely to have been put to sleep on their tummies than babies who had survived infancy. Three times as many babies died suddenly and unexpectedly if they had been put to sleep on their tummies. Earlier recognition of the risks of putting babies to sleep on their tummies might have prevented over 10,000 infant deaths in the UK and at least 50,000 in Europe, the USA, and Australasia [[Gilbert 2005 \(SR\)](#)].

Basis for this concept

Both patients and health professionals tend to overestimate the benefits and underestimate harms of treatments [[Hoffmann 2015 \(SR\)](#), [Hoffmann 2017 \(SR\)](#), [Rejas Bueno 2022 \(RS\)](#)].

Most people are aware that surgery and medicines can have unwanted (adverse) effects as well as beneficial effects. Adverse (side) effects include everything from mild symptoms, like nausea, to serious effects, like heart attacks. Even new “me too” medicines that are very similar to other medicines known to be effective and acceptably safe can turn out to have unexpected, serious side effects [[Aronson 2020 \(OR\)](#)]. Herbal remedies, too, can have adverse side effects [[Lee 2016 \(SR\)](#)].

Studies that show benefits, especially large benefits, are more likely to be noticed than studies that do not [[Duyx 2017 \(SR\)](#), [Ioannidis 2005 \(SR\)](#)]. Subsequent studies, which often contradict those studies or show smaller benefits, [[Ioannidis 2005 \(SR\)](#), [Serra-Garcia 2021 \(SR\)](#)], get less attention [[Serra-Garcia 2021 \(SR\)](#)]. Research reports commonly emphasise findings that suggest benefits, while ignoring other findings [[Chiu 2017 \(SR\)](#)]. Press releases are often designed to attract favourable media attention and news reports of those studies do the same [[Yavchitz 2012 \(RS\)](#)]. Most news reports about treatments mention at least one benefit, but less than half mention or adequately discuss harms [[Oxman 2022 \(SR\)](#)].

Harms are often poorly reported in treatment evaluations [[Eidet 2020 \(SR\)](#), [Hodkinson 2013 \(SR\)](#)], as well as in news reports. Advertisements are used to promote purchase of treatments. Even when advertisements are regulated, they emphasise benefits while information about potential harms is provided in fine print [[Berndt 2005](#), [Frosch 2007 \(RS\)](#), [Woloshin 2001 \(RS\)](#)]. Public health authorities, health services, and governments, whilst acting with good intentions, also sometimes emphasise

potential benefits while ignoring or downplaying potential harms of behaviours that they believe to be beneficial, such as participating in screening programmes [[Jørgensen 2004 \(RS\)](#), [McCartney 2010](#)].

Implications

Always consider the possibility that a treatment may have harmful effects.

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