

Belief that treatment is needed

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

1.3a Do not assume that treatment is needed.

Explanation

Effective treatments can prevent health problems and premature death and improve the quality of life. However, nature is a great healer and people often recover from illness without treatment. Likewise, some health problems may get worse despite treatment, or treatment may even make things worse. Not using a treatment is not the same as “no treatment”. Waiting to see what happens (“letting nature take its course”), with or without treating symptoms such as pain, is a treatment option.

Sore throats are an example of an illness that gets better without treatment. Sore throats caused by bacteria (strep throat) have been treated with antibiotics primarily to prevent rheumatic fever. Rheumatic fever still occurs in some parts of the world, but it is very rare in many parts of the world. In those parts of the world antibiotics are used primarily to promote faster recovery. Antibiotics have a modest effect on recovery in the first few days, but after seven days, 90% of patients are symptom-free with or without antibiotics [[Spinks 2013 \(SR\)](#)]. Moreover, antibiotics have adverse effects, including diarrhoea and rash, and widespread use of antibiotics contributes to antibiotic resistance.

Basis for this concept

Inappropriate healthcare is not easily defined or measured, but it is widespread [[Brownlee 2017 \(OR\)](#)]. This includes inappropriate use of diagnostic tests and use of treatments that are not effective or do more harm than good, as well as use of treatments that are not needed.

Antibiotics, for example, are not needed for common respiratory tract infections [[Hirschmann 2002 \(OR\)](#), [Tan 2008 \(SR\)](#)]. These illnesses are rarely serious and get better without treatment. Antibiotics do not help and can cause harm. Treating symptoms by other means frequently helps.

Aggressive care for older people and dying patients is another example of treatments that are not needed. Older people near the end of their life often receive non-essential medicines that can cause discomfort and serious side effects or are no longer beneficial given limited life expectancy. Nearly 50% of older adults take one or more medications that are not necessary [[Maher 2014 \(OR\)](#)]. A “good death” is free from avoidable distress and suffering for the individual, the family, and caregivers, and in accord with the individual's and family's wishes. Unwarranted medicalisation of the last phase life with surgery, intensive testing, medical procedures, polypharmacy, hospitalisation, and intensive care increases distress and suffering rather than reducing it. Most people would prefer to die at home, yet about half die in hospital worldwide [[Brownlee 2017 \(OR\)](#)]. At the same time, appropriate palliative care is underused.

Implications

Always consider the usual course of a health problem when considering treatments other than waiting to see what happens. Sometimes treatment is not needed and may even make things worse.

References

Systematic reviews

Spinks A, Glasziou PP, Del Mar CB. Antibiotics for sore throat. Cochrane Database Syst Rev. 2013;2013(11):Cd000023. <https://doi.org/10.1002/14651858.cd000023.pub4>

Tan T, Little P, Stokes T. Antibiotic prescribing for self limiting respiratory tract infections in primary care: summary of NICE guidance. BMJ. 2008;337:a437. <https://doi.org/10.1136/bmj.a437>

Other reviews

Brownlee S, Chalkidou K, Doust J, Elshaug AG, Glasziou P, Heath I, et al. Evidence for overuse of medical services around the world. Lancet. 2017;390(10090):156-68. [https://doi.org/10.1016/S0140-6736\(16\)32585-5](https://doi.org/10.1016/S0140-6736(16)32585-5)

Hirschmann JV. Antibiotics for common respiratory tract infections in adults. Arch Intern Med. 2002;162(3):256-64. <https://doi.org/10.1001/archinte.162.3.256>

Maher RL, Hanlon J, Hajjar ER. Clinical consequences of polypharmacy in elderly. Expert Opin Drug Saf. 2014;13(1):57-65. <https://doi.org/10.1517/14740338.2013.827660>