

## Comment

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# Evidence and information in medicine

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Equipoise is a concept that refers to clinical situations where alternative therapies have equivalent benefits, risks and secondary effects, in the absence of available scientific information that might support a preference. Equipoise is a much debated issue in clinical research, but has scant presence in everyday medical practice that must deal with uncertainties, probabilities and a fair amount of judgement and experience. Evidence-based medicine intends reducing these imponderables since they may conceal useless, even harmful practices, by accumulating empirically validated data. Epistemonikos (= what is worthwhile to be known) is a valuable contribution to refine medical judgement and improve its practice.

Supplement Epistemonkos 2

(<https://www.medwave.cl/link.cgi/Medwave/6994>)

recently published in *Medwave*, includes 13 articles proposing a systematic, though not exhaustive, meta-analysis of health-related research focused on clinical issues whose management is under debate. The analysis reveals that most data on various effectivity criteria are poor or very poor on conclusive evidence, whereas data on adverse effects show evidence that is poor, moderate or occasionally high.

A high proportion of biomedical publications have scarce certainty value, failing to assist clinicians in clearing doubts or providing solid evidence to support his/her therapeutic decisions. Clinical practice continues to be fraught with uncertainties, probabilities and judgements that dependent on contextual factors. Expectations of efficacy are proclaimed by biomedicine, but not fulfilled, leading to social distrust, and contributing to a notorious increase in reliance on non-allopathic medical practices, be they complementary or alternative.

Biomedicine presumes to know more than it does, thus generating distrust that Solano and Helguero-Satin believe is due to misinformation and false claims provided by Internet [1]. The two examples they present are unconvincing, firstly referring to an editorial piece protesting against fiscal support granted to homeopathy

and other complementary procedures, in a weakened public health budget, as occurs in many nations [2]. These changes ought to be seen as cultural processes that reaffirm the values of traditional medicines.

Secondly and equally inconsistent is to blame the Internet for social movements protesting against vaccination initiatives. Neurologic damage supposedly caused by thimerosal was a crude hoax perpetrated within the medical establishment as published in *The Lancet* [3], which received a brief period of credibility both in the media and by public health authorities [4]. Anti-vaccination movements, which date back to the 19th century [5], are not against vaccination, their emphasis is on opposing obligatory programs: "We are not systematically against vaccination, but against systematic vaccination" [5].

This note does not intend to present value judgement on allopathic vs. complementary medicine, or to discuss the benefits or risks of immunization programs. Its purpose goes no further than nudging medicine to acknowledge its limitations, the weakness of its information sources as shown by Epistemonikos, and the opacities of biomedical research. Medicine ought to account for the "crisis" of current practices by evolving a complex process of analysis and reflection, allowing for thought, practice and self-criticism in an effort to regain citizenship's trust. No doubt, the media and the profusion of digital social networking websites form and deform public opinion, but they respond rather than create reactions to complex and rhizomatic cultural changes occurring in medicine as well as in other social processes.

## Notes

### From the editor

The author originally submitted this article in Spanish and English. The *Journal* has not copyedited this English version.

### Declaration of conflicts of interest

The author declares that he has no conflict of interest.

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