

The bayesian method: homeopathy in scientific perspective

Hahnemann translated into Likelihood Ratio (LR)

	Rhus-t.	Others	
"Amelioration by motion is 10 times more frequent in rhus-t. patients than in other patients"	50%	5%	LR=10
"Rare symptoms are most important"	20%	0.1%	LR=200

Bayes' theorem: Posterior chance ~ LR x prior chance
 → More/ better symptoms increase the chance of cure

Cure by Rhus-t.?	Chance of cure (cumulative)
0. No symptoms	1%
Symptom 1: Motion ameliorates (LR=10) →	9%
Symptom 2: Desire cold milk (LR=6) →	37%
Symptom 3: Wet weather aggravates (LR=4) →	72%

After the first symptom posterior chance = 9%; after the second symptom posterior chance=37%; etc. Do not mind about the formula, that's the computers' job.

Introduction

Homeopathic prescribing is based on symptoms. Each symptom has its' own value, based on certain rules. The most famous rule is Hahnemann's aphorism that says "Rare and peculiar symptoms are the most important indicators for homeopathic medicines". Furthermore, two centuries of experience confirm that each homeopathic medicine has its own most important symptoms. These symptoms are seen more frequently in patients cured by that medicine than in other patients.

The same principle is well-known in epidemiology: a diagnostic test is better as it is positive more frequently in people with the disease than in other people. If ultrasonography is positive in 80% of appendicitis cases and in 10% of people that do not have appendicitis, likelihood ratio (LR) = 8.

Scientific base for the repertory

Applying LR it is possible to replace repertory rubrics based on ill-defined data by rubrics assessed by prospective research on thousands of cases.

If the symptom 'Fear of death' is assessed, we can add this information to the existing repertory. Below, we see a hypothetical example. LR is indicated in red between hyphens:

FEAR

- **Death**, of: in general, more than expected considering circumstances; occurring almost daily. *Prevalence 5% (±0.5)*

Acon. (6), act-sp., agn. (2.5), all-s, ..., apis (3), arg-n. (3), **Ars.** (4), asaf., aur. (1), .. lach. (3.5), **Lat-m.** (6), led., ...

The difference

A repertory based on prospective research of each symptom is by far more reliable, but there is another important advantage: In the present repertory we cannot differentiate between **Acon.** and **Ars.** if the patient has a fear of death, because they are both in bold type. If LR assessment shows that **LR for Acon.=6** and **LR for Ars.=4** we can estimate our chance of cure. We need 3 symptoms with LR=6 to reach the same certainty as 4 symptoms with LR=4.

Symptom	Certainty with LR=6 (%)	Certainty with LR=4 (%)
1	6	4
2	26	14
3	68	39
4		72