# **Original Article**

# What is a homoeopathic symptom, in daily practice and research?

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#### **Abstract**

Background: For two centuries, homoeopathic practitioners are using personal characteristics, symptoms, and diagnoses/conditions to compare the "patient picture" with the "medicine picture." All data are considered within the context of the totality, using a so-called heuristic strategy. In prognostic factor research analyzing homoeopathic symptoms, we cannot use this context. Question: What is the essence of a homoeopathic symptom and how do we make assessment of homoeopathic symptoms applicable in daily practice? Methods: A questionnaire with seventy polar symptoms represented in Likert scales was tested in an outpatient clinic in 300 patients. Prevalence of symptoms and correlations between symptoms and between symptoms and conditions were analyzed. Outcome: The prevalence of symptoms varied widely; sometimes, prevalence was too high to give meaningful information. Theoretical considerations about heuristics can explain this variation. There is a considerable correlation between symptoms and between some symptoms and some conditions. Conclusion: The main characteristic of a homoeopathic symptom is its peculiarity, resulting in low prevalence. We can achieve this in research by using more cutoff values in our questionnaire and by guiding the filling in of the questionnaires by well-trained doctors. Correlations between symptoms and between symptoms and conditions should be monitored. Standardization of prognostic factor research is necessary to be able to generalize results.

**Keywords:** Heuristics, homoeopathic symptom, likert scale, prognostic factor research, repertory

#### INTRODUCTION

Basically, the same homoeopathic repertory is used all over the world for more than a century despite huge climatological, cultural, and other variations and historical developments. Homoeopathic practitioners in cold and in warm countries use the same repertory rubrics for being warm-blooded or cold-blooded and for influences of weather. Cultural differences do not seem to hamper the use of rubrics concerning emotions and food desires; we have no different rubrics for different countries or cultures. A homoeopathic practitioner records a "desire for spices" in part of the patients because this makes a difference in the choice of medicines. A homoeopathic symptom generates the feeling, "This is special, this characterizes this individual." This single symptom, however, is just a part of the whole medicine picture.

On the other hand, the repertory should be validated. [1] Hitherto repertory entries were largely based on single observations of a symptom occurring in a proving or in a "cured" case, i.e., the absolute occurrence of symptoms. This is a systematic and serious mistake; a symptom is an indication for a specific medicine only if the symptom occurs more frequently in

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patients responding well to this medicine than in other patients. This is intuitively understandable, but also based on Bayes' theorem: [2] repertory entries must be based on the prevalence of the symptom in the medicine population compared with the prevalence in the remainder of the population. This prevalence can only be assessed by systematic scientific research if possible prospective. [3] This involves checking of symptoms in every new patient and taking the symptoms out of their context.

In previous research, the prevalence of six symptoms was assessed; vague symptoms, such as "sensitivity to injustice," but also less vague symptoms, such as "recurrent herpes of the lips." The definition of symptoms was based on consensus, and symptoms were recorded as "moderate" or "strong." This rendered larger variation between observers in the symptom "sensitive to injustice" and smaller variation in "recurrent herpes of the lips." The variation between observers seems to be caused by different interpretations of the questions and answers. Prospective

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assessment of symptoms is different from eliciting symptoms in daily practice, but what is the essence of this difference?

In future prognostic factor research, we assessed a large number of "polar symptoms" (symptoms with opposites, such as desire or aversion for spices) in outpatient clinics of the Regional Research Institute for Homoeopathy, Navi Mumbai, of the Central Council for Research in Homoeopathy (CCRH) in India. Polar symptoms are frequently used but are nevertheless the most problematic symptoms in the repertory. The Swiss pediatricians apply questionnaires with a large number of polar symptoms for every new patient. [6] In this case, the questionnaire is filled in by the patient, assisted by the doctor who has experience with this procedure. For the Indian situation, we tested the questionnaire in different settings. Our purpose was to stay as close as possible to normal homoeopathic practice and still obtain optimal validity of our outcome. In this paper, we discuss some theoretical considerations and the outcome of testing the first concept of the questionnaire.

The most relevant theoretical consideration is the concept of slow and fast thinking. In a seminal paper, Tversky and Kahneman introduced this concept. If you drive a car, you can normally still have a conversation with your passenger; the actions required for driving are an automated routine that allows for other simultaneous activities. This part of our thinking is called fast thinking. If, however, something unexpected happens, such as an accident ahead of you, it will be impossible to continue your conversation and you need all your mental capacities to avoid a collision: slow thinking.

Fast and slow thinking makes the difference between homoeopathic symptoms in daily practice and prospective research. In daily practice, a symptom is an element that stays hidden, or comes up, in a larger picture. The symptom is there, but it gets its real meaning in combination with all other symptoms. In homoeopathic physicians memory, there are a number of medicine pictures, and during then consultation, several of these medicine pictures pass by, triggered by the patient in front of them. This passing by of medicine pictures is usually fast thinking, it happens without any effort, and it will influence what symptoms they perceive as relevant in homoeopathic perspective. This strategy of problem-solving by way of heuristics. Prospective assessment of homoeopathic symptoms is slow thinking: The physician intentionally checks if the symptom is present, without any context. If the patient fills in the questionnaire without any guidance by a homoeopathic practitioner, the heuristics are neglected.

The more we think about clinical research, the more we realize how much fast thinking – generally expressed as "clinical judgment" – is involved in clinical practice. Of course, the goal of research is to improve clinical practice, but we must take care not to lose the advantages of clinical judgment in the process.

#### Symptoms in homoeopathic practice

Let us consider the homoeopathic symptom: "Being warm" in three different situations:

- 1. The patient reports spontaneously, "I am so warm" as a complaint or as one of his/her most important personal characteristics
- 2. The physicians think about the homoeopathic medicine *Pulsatilla* and to confirm this medicine, asks, "Are you a warm-blooded person?"
- 3. The physician does prospective research to assess the symptom "Being warm."

These different situations influence the intensity of "being warm." The spontaneous reporting reflects a high intensity of the symptom because it is a nuisance. If asked as a confirmatory question, the intensity of "being warm" can vary widely from "no," through "yes, I think so," to "yes, very." In patient file, it will probably be mentioned that the patient is warm, even if the answer was "yes, I think so," if the physician was considering a "warm medicine." This means that the physician has a lower "cutoff value" for this symptom if it confirms his/her existing opinion ("The patient must be warm-blooded because I think he/she will respond to this 'warm' medicine").

If the patient's main complaint is "being warm," the doctor also recollects a number of "illness scripts," depending on the context. If the patient is a woman in her fifties, the illness script "menopausal complaints" comes to mind without any effort (fast thinking, availability) because in the female population of this age, the prevalence of menopausal complaints is high. If the patient is a 30-year-old man, this complaint requires more slow thinking; there is no frequently occurring specific illness with the symptom "being warm" in the male population of this age. If, however, the former patient had hyperthyroidism, fast thinking produces the "thyroid disease illness script" because of availability. We can imagine that there is an endless variety of contexts that increase the availability of corresponding illness scripts.

Now, suppose the physician has reasons to think about *Pulsatilla* as an eligible medicine. "Being warm" is an important characteristic for *Pulsatilla*, so we are primed to ask if the patient is warm. This priming also influences the interpretation of the answer. It might be convenient if the patient confirms that he/she is warm because of the illusory correlation, the physician has between "being warm" and *Pulsatilla*: The physician might even discard *Pulsatilla* as a possibility if the patient is not warm. If the patient does not confirm "being warm," we might ask "Are you sure?" or ask substituting questions.

In prospective research, we check the symptom "being warm" in every new patient. This is slow thinking; The physician concentrates deliberately on the symptom, disregarding the context. Altogether, the research setting is different from daily practice. The goal of the research is to improve the repertory rubric related to the symptom. There will be an inclination to define symptoms better than in the present repertory. In our prior research, we tried to define a fixed cutoff value when defining "sensitivity to injustice," but in daily practice, we are less aware of cutoff values.

#### The essence of a homoeopathic symptom

We use homoeopathic symptoms to discern between different personalities (medicine pictures). The essence of a good homoeopathic symptom is given by Dr. Hahnemann in aphorism 153 of the Organon Medicine<sup>[8]</sup> about peculiarity. The more peculiar the symptom, the better the indication for corresponding medicines.

#### Peculiarity is synonymous to low prevalence

The more the peculiar, the lower the prevalence. The same symptom, however, can be more or less peculiar, depending on cutoff value. Consider the three situations in this example. First situation is the spontaneous recording. One can imagine that the threshold to mention this symptom is rather high because he/she will not often have spontaneous reporting of this symptom, apart from menopausal situations. This means that for the cutoff value to be high; one must be pretty warm to mention this as a complaint. The prevalence of this complaint in this degree, apart from menopause, is low.

If the symptom is checked by the practitioner to confirm his/her consideration of a warm medicine, the prevalence will be higher. This is partly because the practitioner can be right, the patient is indeed very warm-blooded, but confirmation bias is also likely in this case. Check this for his/her in one then practice: Would they ask "Are you a warm or cold person?" or "Are you warmer than most people you know?" in case of confirming a medicine?

To summarize this: A symptom becomes a homoeopathic symptom if it distinguishes between people by some degree of peculiarity, i.e., by lower prevalence.

#### **Peculiarity and cutoff values**

How to apply this in research? The prevalence of a symptom in spontaneous reporting is probably lower than the real prevalence because people do not mention all their symptoms (recall bias). The prevalence in confirmation will probably be too high because the physician lowers his/her cutoff value. Many symptoms have a continuous scale of intensity where we have to choose a cutoff value for qualifying a symptom as positive. For some symptoms, this can be more precise, like "more than once a week" for "grinding teeth during sleep," but even then, there may be exceptions from such a rule, to be judged clinically.

This is consistent with Hahnemann's aphorism 153<sup>[8]</sup> that more peculiar symptoms have greater value. Returning to our initial division between spontaneous reporting of symptoms and confirmation of symptoms, the spontaneous reporting has a high cutoff value and the confirmation a low cut-off value. We see a similar pattern in the way we formulate the symptom in a questionnaire, with questions such as:

- 1. "Are you frequently warm?"
- 2. "Are you warm or cold?"
- 3. "Are you warm, cold, or not sensitive to temperature?"
- 4. "Regarding temperature, are you predominantly: Very warm-warm-neutral-cold-very cold"
- 5. "Are you warmer than most people you know?"

We can influence the prevalence of a symptom by the phrasing of the question. The most eligible phrasings out of the phrasings mentioned above seem:

- "Regarding temperature, are you predominantly: Very warm-warm-neutral-cold-very cold"
- 2. "Are you warmer than most people you know?"

In the first phrasing, the physician offer more alternatives, spreading the possible answers over a wider range. This way we introduce different "cutoff values," different degrees of intensity of a symptom. The stronger the symptom, the more the peculiar. The second phrasing is suited to detect the peculiarity of the symptom, also placing it in the context that is familiar to the patient. In this paper, we present a test of a questionnaire with five possible answers to polar symptoms.

# **M**ETHODS

The polar symptoms questionnaire comprised seventy questions frequently used in the daily homoeopathic practice. The questionnaire incorporated various domains to elicit the response to temperature and its components, climatic response, diurnal variations, influence of physical activities, influence on various stimuli, influence of sleep, influence of eating, cravings or aversions, etc. All opposite symptoms were placed on a 5-point Likert scale, rendering a 3-point Likert scale for each pole such as "neutral-warm-very warm."

The questionnaire was administered to 300 patients reported at the Regional Research Institute for Homoeopathy, Navi Mumbai, under the Central Council for Research in Homoeopathy during the Outpatient Clinics of the Institute for 40 days, from 16th Jan 2016 and 24th Feb 2016. The patients were either under treatment in the Institute or reported as new cases. The treating physician was asked to refer the patients for the research purpose. Verbal informed consent was obtained from the patients before the administration of the instrument. The questionnaire was administered to the individual patients by the physician designated for this purpose. The questions applied to the patients as "first come first serve" basis and after completion of the consultation for his/her treatment. The basic demographic data, duration of the complaints, diagnosis of the complaints, age, gender, etc., were also gathered in addition to the response to the questionnaire.

The data were transferred to a Microsoft Excel Spreadsheet; codes were given to the responses for every question. Neutral is marked by 0, much better/strong desire by +2 and +1 as per the intensity, and marked as -1 and -2 for much worse/strong aversion, except for Q. 11, where very chilly is coded +2, chilly as +1, very warm -2, and warm -1. Absolute numbers and prevalence were calculated for all five categories.

For the most frequently occurring condition, osteoarthritis, the Spearman rank correlations between condition and symptoms were calculated, as well as correlation between symptoms. Principal component analysis (PCA) was applied to identify

groups of symptoms that are correlated. For the correlations, Statistical Package for the Social Sciences (SPSS) (IBM Corp., Armonk, New York 10504-1722 United States was used.

#### RESULTS

In a period of 40 days, 300 questionnaires were gathered. The prevalence of symptoms varied widely from 1% to more than 70%.

Osteoarthritis was the most frequent condition (n = 89) among the 300 patients. For this condition, we found moderate correlations (|0.30| < r < |0.50|) with the symptoms "on waking" (r = -0.392) and "exertion" (r = -0.339) and moderate to strong correlations with the symptoms "rising from sitting" (r = -0.496) and "rising from bed" (r = -0.503). This was expected because of the pathology. Calculating correlation of other conditions with symptoms seemed not valid because of low numbers.

We found some strong correlations ( $r \ge |0,50|$ ) between symptoms related to weather and responses to weather and strongest between "cold aggravates" and "becoming cold aggravates" (r = 0.963). This is semantically obvious. There is also moderate correlation between many other symptoms [Table 1].

PCA is a statistical tool that shows if a larger number of variables are expressing the same entity (http://www.setosa.io/ev/principal-component-analysis/). A principal component that combines several comparable symptoms is responsible for considerably more variation than other principal components. The covariance matrix of the PCA (unstandardized data) showed no strong grouping of symptoms; the first principal component explained 11.01% of all variances [Table 2]. This component consisted mostly of symptoms related to becoming cold by various reasons. The

second principal component was mostly related to activity and explained 7.73% of all variances [Table 3]. Lower principal components did not lead to a reduction of variables. After the second principal component, the variation explained per component was much less as shown by the Scree plot in Figure 1 and Tables 2, 3.

#### **Testing cutoff values**

A questionnaire regarding seventy polar rubrics was tested with 300 patients of the outpatient clinic in Mumbai. These seventy polar rubrics represent 140 repertory symptoms. All opposite symptoms were placed on a 5-point Likert scale, rendering a 3-point Likert scale for each pole such as "neutral-warm-very warm." Here, we show four of these polar symptoms (eight repertory symptoms) with their numbers [see Table 4 for questionnaire].

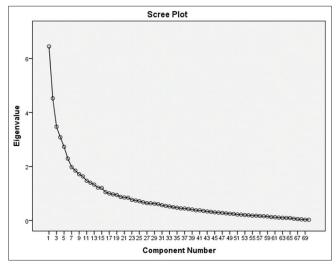


Figure 1: Scree plot showing the amount of variation explained by all principal components

Table 1: Correlation table for some symptoms of a questionnaire administered to 300 patients										
	Open air des/avers	Cold	Cold becoming	Uncovering	Wet weather	Dry weather	Warmth	Warm room	Sun	chilly
Open air desire/aversion										
Cold	0.050									
Cold becoming	0.054	0.963								
Uncovering	0.006	0.351	0.374							
Wet weather	-0.008	0.462	0.493	0.184						
Dry weather	0.058	-0.313	-0.311	-0.027	-0.223					
Warmth	-0.113	-0.488	-0.512	-0.212	-0.280	0.280				
Warm room	-0.128	-0.263	-0.273	-0.101	-0.138	0.189	0.310			
Sun	0.177	-0.217	-0.237	-0.063	-0.245	0.466	0.244	0.246		
Chilly	-0.123	-0.519	-0.515	-0.352	-0.281	0.114	0.452	0.248	0.151	
Perspiration	-0.045	-0.067	-0.075	-0.043	0.053	-0.044	-0.021	0.014	-0.009	-0.105
Winter	0.067	0.902	0.870	0.326	0.439	-0.326	-0.492	-0.253	-0.240	-0.515
Spring	0.004	-0.048	-0.056	-0.008	0.013	0.196	-0.002	0.059	0.022	-0.032
Summer	0.099	-0.408	-0.396	-0.134	-0.270	0.557	0.296	0.293	0.561	0.303

Correlation is strong if the absolute value  $\ge 0.50$ ; moderate if the absolute value is between 0.30 and 0.50. Example: The symptom "cold aggravates' has a strong positive correlation (r=0.963) with "becoming cold aggravates/ameliorates." "Warmth" has a moderate to strong negative correlation (r=-0.488) with "cold"

With the low cutoff value, all persons who have the symptom in a low degree as well as in a strong degree should be taken together for calculating prevalence. The answers to the

Table 2: Result of principal component analysis for nine components

Total variance explained						
Component	Initial Eigen values <sup>a</sup>					
	Total	Percentage of variance	Cumulative percentage			
1	6.448	11.011	11.011			
2	4.525	7.727	18.739			
3	3.473	5.931	24.670			
4	3.082	5.263	29.933			
5	2.731	4.664	34.596			
6	2.295	3.919	38.515			
7	1.976	3.374	41.889			
8	1.849	3.157	45.047			
9	1.716	2.930	47.976			

Table 3: Specification of the contribution of symptoms to the first two principal components

Symptom	1	2
Cold	0.120	0.057
Cold, becoming	0.115	0.047
Wet weather	0.063	0.026
Warmth	-0.102	-0.033
Chilly	-0.188	-0.109
Winter	0.117	0.062
Motion	0.023	-0.105
Move, desire to	-0.017	-0.022
Walking	0.010	-0.142
Walking in open air	0.012	-0.099
Exertion	0.061	-0.042
Rest	-0.063	0.164
Lying	-0.067	0.208

questions can be translated into prevalence based on high or low cutoff value as follows:

- "Aversion open air" with high cutoff value: 3 out of 300. Prevalence is 1%
- "Aversion open air" with low cutoff value: 3 + 6 = 9 out of 300. Prevalence is 3%

The prevalence of some symptoms is calculated this way with high and low cutoff value in Table 5.

In Table 4, we see a wide range of prevalence from 1% for "aversion to open air" in a strong degree to 76.7% for "desire for open air" with a low cutoff value. The prevalence of symptoms in a strong degree also varies considerably; the prevalence of the symptoms "warmth ameliorates" (22.3%) and "desire for open air" (45%) is still high, even with a high cutoff value.

#### **Optimal cutoff value**

It is still hard to tell if there is an optimal cutoff value for symptoms in a prospective assessment of homoeopathic symptoms, or what this cutoff value might be. If we choose a low cutoff value and the result is a prevalence of the symptom above 70%, the symptom is useless. This can be explained by Bayes' theorem (posterior odds = likelihood ratio [LR] × prior odds): The prevalence of the symptom in the population responding well to the medicine must be higher than in the remainder of the population or LR must be above unity. An LR of 1.5 or lower will render hardly any rise in the probability that the medicine will work. In Homoeopathy, the medicine populations are much smaller than the whole population, so the remainder of the population is not much smaller than the whole population. The maximum value the LR can have if the prevalence in the whole population is 70% is about 100/70 = 1.4. If the prevalence in the whole population was 1%, the maximum LR can be 100/1 = 100. These LR values can only be reached if the prevalence of the symptom in the medicine population is 100%. This is hardly ever the case, in retrospective research regarding best cases a prevalence of about 40% was found for very specific symptoms such as

with four polar sympton	ms						
Influence of warmth							
Better (%)	Neutral (%)	Worse (%)	Much worse (%)				
56 (18.6)	153 (51)	10 (33.3)	14 (4.6)				
	Are you in general chilly or v	varm					
Chilly (%)	Neutral (%)	Warm (%)	Very warm (%)				
38 (12.6)	96 (32)	24 (8)	45 (15)				
	Complaints are in the open	air					
Better (%)	Neutral (%)	Worse (%)	Much worse (%)				
44 (14.6)	175 (58.3)	26 (8.6)	28 (9.3)				
	Desire/aversion open ai	r					
Desire (%)	Neutral (%)	Aversion (%)	Strong aversion (%)				
95 (31.6)	61 (20.3)	6 (2)	3 (1)				
	Better (%) 56 (18.6)  Chilly (%) 38 (12.6)  Better (%) 44 (14.6)  Desire (%)	Better (%)   Neutral (%)	Influence of warmth   Better (%)   Neutral (%)   Worse (%)				

Table 5: Prevalence of five symptoms with high and low cutoff values

Symptom	Warmth >	Being warm	Open air >	Desire open air	Aversion open air
High cutoff value (%)	22.3	8.0	9.0	45.0	1.0
Low cutoff value (%)	41.0	23.0	23.7	76.7	3.0

"fear of death" for *Stramonium*. A cutoff value that gives a symptom prevalence of <25% in the whole population seems to be a good starting point. The great advantage of choosing a high cutoff value to get a low prevalence of the symptom is that we get higher LR values and therefore better differentiation between medicines.

In a former assessment of homoeopathic symptoms, we checked only six symptoms so that this could be easily integrated in daily practice. We chose two cutoff values: "strong" and "moderate." The strong degree was reserved for an intensity of the symptom so strong that it caused you to consider corresponding medicines; it made the doctor include the corresponding medicines in his/her considerations. The moderate degree was to exclude medicines: Even while the doctor considered a specific medicine. For the symptom "grinding teeth during sleep," the high cutoff value was "once a week or more." With this cutoff value, the prevalence of the symptom in 4094 patients was 5.3%. This prevalence with this cutoff value was also found in medical literature.

#### DISCUSSION

In observational research, we try to stay as close to daily practice as possible, but homoeopathic symptoms in daily practice are considered in their context with heuristic strategies, while this context and heuristics are neglected in prospective assessment of homoeopathic symptoms. The principal function of homoeopathic symptoms is to distinguish between medicines and more peculiar symptoms perform better in this respect. Peculiarity is strongly correlated with low prevalence. This offers the possibility to use different cutoff values for symptoms, rendering different prevalence of the same symptom. In former research, we defined six symptoms by consensus and assessed them in the context of daily practice using a 3-point Likert scale. This still rendered considerable variation between observers possibly because we did not consider peculiarity of symptoms.

In the prognostic factor research, now prepared by CCRH, treatment and research are separated and the number of symptoms is much larger. This causes more difference between research and daily practice, which has advantages and disadvantages. An important disadvantage appears from the high prevalence of some symptoms because the symptoms are not considered for their peculiarity as we do in daily practice.

We tested a questionnaire with polar symptoms. Each separate symptom, such as "being warm-blooded," was placed on a 3-point Likert scale, offering two cutoff values for the intensity of the symptom. The outcome was a large variety of prevalence from 1% to 45%, even with the high cutoff value. Symptoms with prevalence higher than 25% are of little value in distinguishing between medicines; therefore, we need higher cutoff values for some symptoms. This can be achieved with longer Likert scales, say, 5-point instead of 3-point scales.

A longer Likert scale may not be sufficient, especially when the questionnaire is filled in without guidance of a doctor. Patients may be tempted to fill in extreme values in questionnaires for several reasons, such as the wish to help the investigator with strong answers or to make clear how much they suffer from their complaints. This may be remedied by assisting the patient while filling in the questionnaire and making clear why the patient should preferably not use extreme values in the questionnaire, only for very few symptoms. The doctor could guide the patient by explaining that the questionnaire is meant to find the most distinctive symptoms for each patient.

Another point of concern is the fact that symptoms and diseases can be correlated and that symptoms can be mutually correlated.

We found correlations between osteoarthritis and the symptoms/modalities "waking," "exertion," "rising from sitting," and "rising from bed." This can result in bias if we use LRs of these symptoms in other conditions. However, it is rectified to make a repertory rubric "osteoarthritis" with these modalities as subrubrics. For using such symptoms as general modalities, we should assess the same questionnaire in a larger number of conditions and pool results. This pooling of results requires rigorous standardization of methods: the same questionnaire should be used for all prognostic factor research projects, with the same guidance in filling in by homoeopathic practitioners. All practitioners guiding this filling in should receive the same training. Results from different projects should be compared using statistical techniques.

Correlations between symptoms should be notified by calculating correlations and by performing PCA. In daily practice, however, homoeopathic practitioners are used to dealing with correlation between symptoms. Like in this assessment, correlations can be suspected intuitively and practitioners are used to choose a variety of uncorrelated symptoms in one patient for repertorization. This repertorization is just a tool to obtain a reduced number of medicines, and these medicines are compared regarding the whole picture. It is like using a weather forecast: One has to make his/her own plans because the weather forecast considers a limited set of variables, but one wants a correct weather forecast.

The practice population does not represent the general population, but this is not a problem because we want to compare different populations responding to different medicines within this population. However, if a clinic is specialized in specific conditions, the results cannot be

transferred to clinics with other specialties. The same questionnaire should be assessed in Many Clinics, also using the same methodology in guiding the patients filling in the questionnaire. Combining data of different clinics, we obtain large numbers with reliable prevalence of symptoms in the population attending homoeopathic practitioners.

The advantage of using longer Likert scales is that we can choose freely the most appropriate cutoff value for each symptom, rendering a prevalence of the symptom that seems suitable. As a consequence, we must mention the prevalence of the symptom when we use results to improve the repertory rubric, so the practitioner can relate this to each patient.

There was strong to moderate correlation between many pairs of symptoms. The highest correlation (r = 0.963) was found between "cold" and "becoming cold." Doctors and patients indicated that they did not understand the difference between these two symptoms. PCA indicated only two principal components which explained more variation than others. The strongest principal component was separated from the second by reaction to becoming cold for various reasons. We decided to remove the symptom "becoming cold" from the next version of the questionnaire, not only because of the confusion it caused in doctors and patients but also because the PCA shows that becoming cold is related to various other questions in this questionnaire. We did not remove further symptoms with high correlation. Our aim is to improve repertory rubrics; practitioners using the repertory are implicitly aware of correlation between rubrics and will intuitively avoid using several strongly related symptoms in repertorizations.

In the future, we could consider computer algorithms, where patients fill in a questionnaire and the computer automatically chooses the appropriate cutoff value for each symptom, then producing suggestions for eligible medicines.

If we wanted to develop the homoeopathic method from scratch with scientific methods, we might have made different choices. However, we are using our materia medica and repertories after considerable training, and the homoeopathic method appears to be reproducible all over the world and over generations. This is due to clinical experience in the interpretation of symptoms. The most important aspect of this clinical expertise is implicit use of cutoff values so that the symptom becomes a homoeopathic symptom, i.e., a symptom that distinguishes between patients by peculiarity.

# CONCLUSION

The essence of a homoeopathic symptom is that it differentiates between patients responding to different homoeopathic medicines. We risk losing this information when we place a symptom out of its context like we do in prospective research. Research is mostly based on slow thinking while daily practice involves much fast thinking.

Many symptoms manifest themselves in a continuous scale of intensity; the higher the intensity, the lower the prevalence of the symptom. The intensity of a symptom depends, besides on personal variation, on an unknown number of variables, such as climate, culture, and age.

A homoeopathic practitioner uses clinical experience (fast thinking) to adapt cutoff values to such variables. This results in an intensity of the symptom that makes it special, resulting in a rather low prevalence in a comparable population. Based on former research and theoretical considerations, we estimate that "homoeopathic" symptoms have prevalence below 25%. Symptoms with very low prevalence, below, say 1%, will result in insufficient numbers in research.

In prospective assessment of symptoms, we can apply Likert scales to record a symptom in various intensities. We need longer Likert scales (more cutoff values) if symptoms in moderate intensity have a high prevalence in the general population. The cutoff value that renders prevalence between 1% and 25% can be used for calculating LRs. Researchers must be aware of these considerations and properly trained to guide the patient in filling in the questionnaire with the symptoms.

Homoeopathic symptoms can be related to each other and to specific conditions. Users of homoeopathic repertories will handle relationships between symptoms intuitively, but researchers must be aware of this if research is confined to specific conditions. The outcome of research in this case is only valid for this condition but might be generalized if results of different projects can be pooled. To achieve this, the same questionnaire should be used with the same guidance in filling in for all diagnostic research projects.

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#### Was ist ein homöopathisches Symptom, im täglichen Praxis und Forschung?

#### Auszug

**Hintergrund:** Seit zwei Jahrhunderten verwenden homöopathische Praktiker persönliche Charakteristika, Symptome und Diagnosen/Zustände, um das "Patientenbild" mit dem "Arzneimittelbild" zu vergleichen. Alle Daten werden im Rahmen der Gesamtheit mit Hilfe einer so genannten heuristischen Strategie betrachtet. In der prognostischen Faktorforschung, die homöopathische Symptome analysiert, können wir diesen Zusammenhang nicht nutzen.

**Ziel:** Was ist das Wesen eines homöopathischen Symptoms und wie wenden wir homöopathischen Symptome in der täglichen Praxis an?

**Methoden:** Ein Fragebogen mit 70 polaren Symptomen in Likert-Skalen wurde in einer Ambulanz an 300 Patienten getestet. Die Prävalenz der Symptome und deren Korrelationen zwischen den Symptomen sowie Symptomen und Modalitäten wurden analysiert.

**Ergebnisse:** Die Prävalenz der Symptome variierte sehr, manchmal war die Prävalenz zu hoch, um zu sinnvollen Angaben zu kommen. Theoretische Überlegungen zur Heuristik können diese Abweichungen erklären. Es gibt eine erhebliche Korrelation unter den Symptomen sowie zwischen einigen Symptomen und einigen Modalitäten.

Fazit: Das Hauptmerkmal eines homöopathischen Symptoms ist seine Besonderheit, die zu einer geringen Prävalenz führt. Dies können wir in der Forschung erreichen, indem wir in unserem Fragebogen mehr Grenzwerte verwenden und das Ausfüllen der Fragebögen durch gut ausgebildete Ärzte durchführen lassen. Korrelationen zwischen Symptomen sowie zwischen Symptomen und Modalitäten sollten überwacht werden. Eine Standardisierung der prognostischen Faktorenforschung ist notwendig, um Ergebnisse verallgemeinern zu können.

# ¿Qué es un síntoma homeopático en la práctica clínica y en la investigación ? RESUMEN

**Fundamento:** Durante dos siglos, los médicos homeópatas han estado utilizando las características personales, los síntomas y los diagnósticos/las patologías para comparar el "cuadro del paciente" con el "cuadro del medicamento". Todos los datos se consideran dentro del contexto de la totalidad, utilizando una estrategia heurística. Este contexto no se puede aplicar en la investigación de los factores pronósticos que analiza los síntomas homeopáticos.

#### Pregunta:

¿Cuál es la esencia de un síntoma homeopático y cómo hacemos que la evaluación de los síntomas homeopáticos sea aplicable en la práctica diaria?

**Método:** En un ambulatorio, se examinó un cuestionario de 70 síntomas polares, representados en las escalas de Likert, en 300 pacientes.

Se analizó la prevalencia de los síntomas y las correlaciones entre los síntomas y las condiciones.

**Resultado:** La prevalencia de los síntomas varió ampliamente, a veces la prevalencia fue demasiado elevada como para dar una información significativa. Las consideraciones teóricas sobre la heurística pueden explicar esta variación. Existe una correlación considerable entre los síntomas y entre algunos síntomas y algunoas condiciones.

**Conclusiones:** La característica principal de un síntoma homeopático es su peculiaridad que da lugar a una prevalencia escasa. Esto se puede conseguir en la investigación si se utilizan más valores de corte en nuestro cuestionario y si médicos bien formados dirigen la cumplimentación de dichos cuestionarios. Deben monitorizarse las correlaciones entre los síntomas y entre los síntomas y lo-as condiciones. Es necesario estandarizar la investigación de factores pronóstico para poder generalizar los resultados.

# दैनिक अभ्यास और अनुसंधान के क्षेत्र में होम्योपैथिक लक्षण क्या हैं ?

सार

**पृष्ठभूभिः** गत दो सदी से 'औषधि तस्वीर' की तुलना 'रोगी तस्वीर' से करने के लिए होम्योपैथिक चिकित्सकों द्वारा व्यक्तिगत विशेषताओं, लक्षणों और निदान / स्थिति का उपयोग किया जा रहा हैं। एक तथाकथित अनुमानों की रणनीति का उपयोग करते हुए सभी डेटा को समग्रता के संदर्भ में माना जाता है। भविष्य निधारक नैदानिक अनुसंधान कारक में होम्योपैथिक लक्षणों के विश्लेषण के लिए हम समग्रता के संदर्भ का उपयोग नहीं कर सकते। **प्रश्नः** एक होम्योपैथिक लक्षण का सार क्या है और कैसे हम दैनिक व्यवहार में लागू होम्योपैथिक लक्षणों का मूल्यांकन कर सकते हैं।

विधिः 300 रोगियों वाले एक आउट पेशेंट क्लिनिक में एक प्रश्नावली का परीक्षण किया गया जिसमें लाइकेर्ट स्केल पर प्रस्तुत सत्तर ध्रुवीय (पोलर) लक्षण थे। लक्षण और लक्षण के बीच और लक्षण और स्थिति के बीच सह—संबंध की व्यापकता का विश्लेषण किया गया।

परिणामः लक्षणों की व्यापकता अत्याधिक रूप से विविध थी; कभी कभी, सार्थक जानकारी देने के लिए व्यापकता बहुत अधिक थी। अनुमानों के बारे में सैद्धांतिक विचारों द्वारा इस बदलाव की व्याख्या की जा सकती है। यहाँ लक्षणों के बीच और कुछ लक्षण और कुछ स्थितियों के बीच महत्वपूर्ण संबंध है। निष्कर्षः एक होम्योपैथिक लक्षण की मुख्य विशेषता इसकी विलक्षणता होती है, जो इसकी व्यापकता के परिणामस्वरूप होती है। हम प्रश्नावली में अधि कि कटऑफ मूल्यों के उपयोग और प्रश्नावली भरने में प्रशिक्षित चिकित्सकों के मार्गदर्शन द्वारा, अनुसंधान क्षेत्र में इस लक्ष्य को हासिल कर सकते हैं। लक्षणों के बीच और लक्षणों और स्थिति के बीच सह—संबंध पर नजर रखी जानी चाहिए। परिणाम समान्यीकरण करने में सक्षम होने के लिए निदान कारक अनुसंधान का मानकीकरण आवश्यक है।