Collecting clinical experience of homeopathic support in COVID-19

Tenth issue

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In the previous newsletter we explained statistical certainty and the importance of larger numbers. With increasing statistical certainty, the relationship between medicines and a specific symptom becomes more clear. Instead of grading based on typology – like plain text, italics and bold type – we can differentiate with greater precision. This is especially important for relatively common symptoms which can indicate many medicines, resulting in large symptom rubrics in the homeopathic repertory. In epidemics such as the present COVID-19 we see certain symptoms predominate, for example fatigue, cough, fever, dyspnoea, pains, diarrhoea, et cetera. Based on such symptoms, we will select homeopathic medicines such as *Arsenicum (ars)*, *Bryonia (bry)* and *Gelsemium (gels)*, but experience with epidemics over two centuries tells us that homeopathy can help more patients if we personalise the choice of these medicines. We have to understand more precisely the relationship between, say, fatigue and the medicines *ars*, *bry* and *gels*. This can only be achieved by recording the symptom in a large number of cases to minimise the role of mere chance. In this newsletter we summarise our findings with the numbers gained to date and suggest how to use this new information.

So far, we have collected 161 cases who have responded to 30 homeopathic medicines, see Figure 1. Cases were included in the database only if it was probable that one particular medicine was responsible for the improvement. Three medicines, *Arsenicum (ars)*, *Bryonia (bry)* and *Gelsemium (gels)*, were used in 57% of all successful treatments. With the present numbers, we have 11 symptoms for these three medicines which show a statistically significant likelihood ratio (LR) for a positive outcome (Table 1). To take the example of fatigue, *gels* has a LR greater than one, whilst the others are less than one. This means that *gels* is most probably indicated more strongly by this symptom than the other medicines, while in the original repertory all three medicines were indicated in the same degree.

Recording such relatively common symptoms and representing them by LR allows a clearer differentiation of medicines than is possible with the existing repertory. Table 1 shows that the *bry* and *gels* populations both have 20 patients with 'fatigue', but the *bry* population consists of 45 people and *gels* of 25, so the proportion of responsive patients is larger in the *gels* group. For 'fatigue' LR(gels)=1.62 (95% confidence interval 1.25 - 2.10), a weak indication for *gels*, as may be expected with such a common symptom. However, the 95% confidence interval (CI) indicates that LR is not greater than unity by chance alone. Applying Bayes' formula (posterior odds = LR x prior odds) allows us to calculate the increased chance that *gels* will work if 'fatigue' is present. If hypothetically the prior chance of *gels* being effective is 10%, the posterior chance becomes 15%.

The inclusion of likelihood ratios of less than unity (indicating a relative contra-indication) makes this Bayesian repertory much more powerful because it accentuates the difference between medicines. The posterior chance that *bry* will work if 'fatigue' is present becomes lower because LR(bry)=0.77. If the hypothetical prior chance is

bry	45
gels	25
ars	21
phos	12
camph	12
lob-p	6
sulph	4
puls	3
lyc	3
con	3
kali-bi	3
acon	2
carb-ac	2
eup-per	2
kali-m	2
carc	1
chel	1
stict	1
chin-ars	1
arg-n	1
staph	1
dros	1
sil	1
cocc	1
lach	1
chin	1
carb-an	1
seneg	1
carb-v	1
merc	1
nat-m	1

Figure 1: numbers of cases for 30 different medicines

again 10%, the posterior chance becomes 8%, about half the posterior chance of *gels*. The existing repertory shows only indications, not relative contra-indications. But adding contra-indications to the existing repertory would produce still larger symptom-rubrics which would be difficult to interpret, because values of LR<1 are not easy to understand intuitively. Below we show how to handle this.

Table 1: mini repertory for Arsenicum, Bryonia and Gelsemium regarding COVID-19 like illness. Symptoms are sub-rubrics for corresponding repertory-rubrics, like 'HEAD – PAIN – COVID-19 like disease, in'.

Symptoms	Count	ars	LRars	bry	LRbry	gels	LRgels
	161	21		45		25	
fatigue	**87**	11	0.96	20	0.77	20	1.62
dry cough	**73**	8	0.82	26	1.43	10	0.86
dyspnea	**51**	5	0.72	18	1.41	4	0.46
headache	**48**	6	0.95	17	1.41	9	1.26
slow onset	**46**	6	1.00	14	1.13	9	1.32
fever	**46**	3	0.47	15	1.25	9	1.32
chill	**42**	5	0.90	13	1.16	14	2.72
diarrhoea	**35**	8	1.98	10	1.03	6	1.13
oppression chest	**32**	4	0.95	7	0.72	5	1.01
sudden onset	**31**	5	1.28	11	1.42	1	0.18
throat pain	**31**	4	0.99	11	1.42	7	1.59
muscle/bone pain	**27**	4	1.16	9	1.29	4	0.95
chest pain	**24**	3	0.95	10	1.84	3	0.78
anxiety	**23**	8	3.56	5	0.72	3	0.82
loss of taste and/or smell	**23**	3	1.00	6	0.91		
dry mouth	**17**	4	2.05	9	2.90	1	0.34
thirst	**16**	2	0.95	9	3.31	2	0.78
thirstless	**15**	1	0.48	4	0.94	5	2.72
nausea	**15**	4	2.42	2	0.40	3	1.36
back pain	**13**	1	0.56	8	4.12	1	0.45
chest pain < cough	**12**	1	0.61	7	3.61	3	1.81
> open air	**11**	1	0.67	4	1.47	1	0.54
cough < talking	**11**	2	1.48	4	1.47		
desire cold drinks	**11**			4	1.47	1	0.54
cough < deep respiration	**10**	2	1.67	7	6.01		

Combining symptoms with LR

If we repertorise three common symptoms for the three most frequently prescribed medicines using the existing repertory, we would see no difference between the three medicines. The Bayesian repertory with LR values, however, can show a substantial difference between the three medicines, not only because the indications per medicine become more diverse, but also because relative contra-indications are added. Table 2 shows three examples of how a combination of three symptoms can differentiate between the three medicines. The likelihood ratios for each symptom are multiplied together, effectively multiplying the differences between the medicines.

Table 2: combined likelihood ratio (LR) of combinations of three symptoms.

combinations of symptoms	LR ars	LR bry	LR gels
diarrhoea+chill+anxiety	6.33	0.85	2.50
dry cough+headache+back pain	0.43	8.31	0.49
fatigue+chill+thirstless	0.41	0.83	12.01

If we were to make a repertory-rubric 'Fatigue plus chill plus thirstless' based on these data, we would see only *gels* in bold type, but that would not show the strong differentiation from *ars* and *bry* because relative contra-indication is not included in the normal repertory. This difference becomes more clear if we calculate posterior chances based on a hypothetical prior chance of 10%, see Table 3. The range of posterior chances has been greatly widened, from 4% to 57%, for the combination 'fatigue+chill+thirstless'.

Table 3: effect of combined LR values of Table 2 on posterior chance, assuming a prior chance of 10%.

Posterior chance with 10% prior chance	ars	bry	gels
diarrhoea+chill+anxiety	41%	9%	22%
dry cough+headache+back pain	5%	48%	5%
fatigue+chill+thirstless	4%	8%	57%

Try it yourself

The symptom combinations shown in Tables 2 and 3 will probably be recognised by experienced homeopathic practitioners because of their experience and knowledge of materia medica. They will be more aware of characteristic symptoms, such the restlessness of the *ars* patient, or the aversion to movement of the *bry* patient, or the drooping eyelids of the *gels* patient. However, not all patients show characteristic symptoms that can differentiate between these three medicines, and in such cases a combination of three common symptoms can produce the same indication as one characteristic symptom.

We invite you to try this: can a combination of a few common symptoms have the same effect as one characteristic symptom? Unfortunately, it will take some time before computer-based repertories can help you with the necessary calculations. To overcome this problem, Tom Smedley, Galen Ives and Lex Rutten have created an app which performs these calculations based on actual clinical data. The app asks you to select from 20 symptoms where likelihood ratios have been measured and then gives suggestions for eligible medicines, but confining the choice to *Arsenicum*, *Bryonia* and *Gelsemium*. For the app we selected symptoms that differentiate between these three medicines, but not only symptoms with statistically significant LRs. If data were not available LR is estimated to be LR=1, no indication nor contra-indication.

You can find the app with the following link:

https://hpra.co.uk/

At first sight this app looks like a black box, but that is only because showing the full underlying algorithm and repertory-rubrics would be too complicated. The app is based on the data shown in Table 1 and it shows a positive indication if the combined LR>=3. As a rule of thumb LR=3 corresponds with a rise of posterior chance of about 20%. If the combined LR lies between 3 and 6,

the medicine will appear in plain type; if combined LR is between 6 and 10, the medicine appears in Italics; if combine LR >=10 the medicine appears in bold type.

If the app concludes “Sorry, these symptoms do not indicate a clear preference for any of the three remedies” the patient had not enough differentiating symptoms, or *Arsenicum*, *Bryonia* and *Gelsemium* are unlikely. In both cases you should look for other symptoms and/or another medicine.

MIND: the app covers only the three most used medicines. The underlying database collected good responses to 30 medicines so far, but there were not enough cases for 27 medicines. If the app cannot give an advise, other medicines should be considered. If the app advises a medicine, but the patient has a strong indication of another medicine based on a symptom that is not included in the app, your clinical judgement should prevail, as usual in the use of a homeopathic repertory. The app is meant to be used only by doctors or practitioners who are authorized in their respective countries to practice homeopathic medicine. This does not replace the classical approach of the clinical case, but it is guidance for a choice of remedy.

Disclaimer

LMHI advises to follow all measures recommended by WHO for the prevention, treatment and monitoring of patients with disease covid-19. With this investigation, LMHI is providing data for a treatment with homeopathic medicines to be beneficial for the recovery of this type of patients.

This is based on experience of doctors worldwide treating patients with COVID-19(like) disease. Since the choice of a homeopathic medicine is not illness-centred but patient-centred, symptoms and characteristics of the patient determine the choice of medicine more than the illness. The LMHI collects symptoms and assesses the relationship between an experienced improvement after specific medicines and specific symptoms, expressed as likelihood ratio (LR). According to Bayes’ theorem LR>1 indicates an increased chance of the observed effects in new patients.

Summary of requirements for case descriptions

You might have noticed that the symptom ‘Loss of taste and/or smell’ is not yet in the app. This is because we had not enough cases responding well to specific medicines with this symptom. Possibly this symptom indicates another medicine than the medicines in the app.

We summarise below the minimum data necessary for this project. We already had:

- Severity of COVID-19 illness: Mild – Moderate – Severe – critical
- Is COVID-19 confirmed?
- Medicine, with date of first intake
- Number of hours until onset of improvement and/or until absence of fever
- If possible at least 3-5 symptoms that were characteristic for the case
- Pneumonia on X-ray or CAT

Also check:

- Slow or fast onset of complaints
- Prostration/exhaustion; where is the weakness located
- Fear/anxiety
- Restlessness

- Fever, chill, or chill alternating with fever
- Thirst
- Pain; where
- Cough dry or moist
- Dyspnea
- Throat pain
- Loss of taste and/or smell
- diarrhoea

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